

Political Attitudes: The Role of Information as a Determinant of Direction, Structure and Stability

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ABSTRACT

This thesis explores the relationship between political awareness and engagement and the content and structure of Political Belief Systems. Specifically, the role of information in determining the inter-relatedness, temporal stability and preference direction of political attitudes is evaluated using data from the British General Election Study, the British Household Panel Study and the SCPR Deliberative Poll on Political Issues. The first two chapters provide a review of theorising and research on the political sophistication of the general public, setting this debate within the context of theoretical discussions of democracy. It is argued that perspectives which seek to discount the need for an equitably informed public are both theoretically unsound and empirically unsubstantiated.

The empirical chapters of the thesis comprise three inter-related conceptual and empirical investigations. First, the contention that the less politically informed have labile and ephemeral attitudes toward political issues is evaluated using confirmatory factor analysis and structural equation modeling on data from political attitude surveys. In the second section a longitudinal factor model is fitted to panel data in order to examine how the over-time stability of political attitudes is affected by an individual's political awareness. The third section uses deliberative poll data and regression modeling to make a more causally focused appraisal of the effect of information on both the content and structure of political attitude systems. It is concluded that the uneven distribution of political awareness within the general public is the cause of the systematic differences in the properties of the belief systems of the groups examined and that such differences are likely to hinder the attainment of individual and group interests within a modern democratic polity.

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OVERVIEW

On the tenth of June 1999 less than a quarter of the UK electorate turned out to vote in the European Parliamentary elections, while legislation passed in October of the same year to 'modernise' the second chamber of the UK Parliament abolished hereditary peerages but retained a majority of non-elected 'representatives' at its core. Both of these events provoked serious and widespread concern about the implications for the democratic legitimacy of the polity. These concerns centred on the institutional arrangements for electing representatives and the apathy and disengagement of large sections of the electorate. The over-riding factor connecting both issues, however, was the idea that democracy, somehow, was not being well served.

These examples are merely illustrative of debates over democratic legitimacy which have been ongoing for at least the last two to three hundred years. A third area, however, equally rooted in commonly held notions of democratic theory, currently attracts far less attention. This is the question concerning whether the general public possesses sufficient knowledge and understanding of politics to fulfil the normative requirements of citizenship within a democratic system of government. Although, through the pioneering work of the Michigan school and others, this issue became quite prominent during the 1950's and 1960's, the idea that the 'mass public' might lack certain basic civic competencies has received far less attention than other perceived threats to democratic legitimacy and, when it has emerged as a focus of debate, has proved surprisingly controversial. Scholars have taken issue with the contention that democracy suffers as a result of civic disengagement on a number of different grounds – arguing both that democracy can function adequately without an informed citizenry and that the citizenry, by various means, is able to function *as if* it were equitably and well informed about politics.

Overview

In this thesis I contest these perspectives on both theoretical and empirical grounds. I review the theoretical rationale underlying the belief in the desirability of an equitably informed electorate and set out the evidence supporting assertions that political awareness is unevenly distributed within the mass public and that this has negative consequences for both the public and the private good. The empirical analyses of this thesis address three separate but closely related issues in the debate over the political sophistication of the general public. The first of these is to assess the claim that the general public organise their Political Belief Systems in terms of higher order value dimensions and that these dimensions are useful in understanding and predicting people's positions on more concrete, policy-related issues. Second, a time dimension is incorporated in the analysis in order to investigate the *stability* of political attitudes and how this is related to political awareness and engagement. Third, in order to move beyond an analysis which simply examines the distribution of political sophistication within the public from what might be conceived as a static perspective, a more *causally* focused investigation of the impact of political information on both the direction and internal consistency of attitude systems is provided.

In chapter one I set out the 'democratic deficit' hypothesis, introduce the nonattitude thesis and explain how the two are related. A brief description of theories of democracy is provided and the importance of a politically aware citizenry set within this context. I then review a range of theories which have challenged the importance of an informed electorate – both the macro-social and the more social-psychologically oriented – and argue that there is a lack of empirical evidence to support assertions that such factors are able to compensate for rational decision making within a well informed and engaged public. Finally I introduce two recent methodological developments which have begun to look empirically at the relation between knowledge and attitude – deliberative polling and simulation modeling.

Overview

In chapter two, I take a closer look at the nonattitude thesis – how Converse originally formulated it and how people have developed and countered it since. The four main foci of criticism – measurement error, changing times, inappropriate methodology and core beliefs and values – are reviewed and the problems with each set out. I then discuss the key terms and concepts used in the thesis and describe how they have been operationalised as abstraction measures, correlational measures, longitudinal stability indicators and direct measures of political knowledge.

Chapter three is the first of the empirical chapters. It examines the extent to which the British public make use of higher order value dimensions to structure political belief systems. In the first sections of the chapter, I review the literature on attitude ‘constraint’ as a dimension of political sophistication and discuss the various ways in which it has been operationalised and measured. Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM) are introduced as methods which avoid some of the problems that are apparent in a number of earlier investigations of the issue. The analysis uses the six item scale developed by Heath et al (1993) to measure the ‘left-right’ political value dimension. Confirmatory factor models are fitted to data from the 1997 British General Election Study and the 1991 British Household Panel Study at the population aggregate level and at the level of sub-groups which differ in political awareness. Parameter estimates are compared across models and conclusions are drawn about the structural properties of the belief systems of both groups.

Chapter four extends the analyses of chapter three to look at the extent to which the left-right value dimension – as measured by the Heath et al scale – can be said to lend structure and coherence to more proximal attitudes toward policy issues. It has been argued that the reason we often fail to find relationships between single item measures of issue positions in the general public is that we are looking in the wrong place - rather than looking for

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horizontal consistency, we should more appropriately be searching for evidence of *vertical* constraint ‘from above’. The analysis extends the measurement models fitted in chapter three by incorporating regression paths from the left-right latent construct to a number of different single item policy attitude variables traditionally related to left-right political discourse. Again, conclusions are drawn concerning the extent to which such higher order value dimensions can be said to lend coherence to individual policy attitudes for the population as a whole and across groups varying in political awareness.

In chapter five I incorporate a longitudinal dimension to the analysis. This allows a more fine-grained decomposition of item variance and the ability to examine, not just the consistency *between* related items, but also the stability of responses to the same item *over time*. Response stability and its relation to political sophistication is discussed and the problems of separating out true change from random ‘churn’ are reviewed. SEM is introduced as a potentially powerful method for achieving this objective and a longitudinal common and unique factor model is fitted to the six items of the ‘left-right’ scale on waves one to three of the British Household Panel Study.

In chapters three to five, the analyses presented rely on pre-existing and self-reported measures of political knowledge as the basis for between group comparisons. There is always the possibility with such analyses, that there may be some other unmeasured characteristics that are actually the causal factors underlying any observed relationship between political awareness and attitudinal properties. In chapter six, therefore, I use data from a deliberative poll on political issues to take a more *causally* focused look at how political awareness is related to the internal cohesion of PBSs. A longitudinal factor model is fitted to waves one and two of the deliberative poll and a number of different model parameters are examined in order to evaluate the effect of an ‘information intervention’ on the inter-relatedness and stability of a latent attitude measuring ‘left-right’ value orientation. Attention is also paid to the

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representativeness of the deliberative poll sample and how this relates to conclusions drawn about the impact of information on belief system structure. In chapter seven a different technique is used to address essentially the same question but with a slightly different emphasis and focus. While the analyses in chapter six were concerned with the *direct* effect of information on attitude constraint, in this chapter the focus shifts to how increases in information affect the actual positions taken on individual issues. Logistic regression models are used to simulate the opinions of a 'better informed' public in order to evaluate the effect of increases in information on the *direction* of expressed preferences at both the individual and aggregate level. Subsequently, I take an exploratory look at how changes in issue preference direction, engendered by increases in information, impact on statistical measures of attitude constraint. Through replicating models on independent samples and using different measures of political knowledge to simulate a better informed public, evidence is also presented to assess the general robustness and validity of the simulation methodology.

Chapter eight is the final empirical chapter and looks more closely at some key methodological issues arising from the analyses presented in the preceding chapters: the measurement of political knowledge and how opinion change is related to existing levels of political awareness; and the similarities and differences between predictions made about opinion change under the simulation and deliberative polling methods. The first issue is concerned both with how the political knowledge construct is operationalised and the nature of its relationship with attitude preference direction. The second serves as a kind of mutual construct validation – two different methods purporting to reveal the opinions that a better informed public would hold should come up with the same, or at least similar results. Where differences do arise, it is informative to examine any systematic patterns and how these might be related to the way in which the information effects were estimated. Additional analyses examine the extent of increases in political awareness over the course

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of the deliberative poll weekend and how the amount of over-time opinion change is related to *prior* levels of political awareness. In the concluding chapter I draw together the empirical findings from chapters three to eight and discuss their implications for the theoretical, conceptual and methodological debates introduced in the first three chapters. I then take a broader look at the normative implications of the empirical work, consider how uneven distribution of political sophistication might be countered and discuss potential avenues of future research.

1 POLITICAL INFORMATION, CHOICE AND EFFICACY

"Knowledge is Power"

FRANCIS BACON, Sacred Meditations

There has, in recent years, been something of a resurgence of interest in the political awareness of the general public and the extent to which this affects both the public and the private good. The key feature of this debate has been the idea that without accurate factual information about the content, structure and process of politics, it is not possible for individuals to determine which policies, candidates and parties best reflect their own interests (Delli Carpini and Keeter 1996, Luskin 1987, Bartels 1996, Althaus, 1998) and that, where divergences in political awareness exist, inequalities in political efficacy emerge as a result.

In this thesis I employ a range of data sources and statistical techniques to first establish the validity of the argument that a significant proportion of the British public do not hold meaningful or well thought-out political attitudes within coherent and internally consistent political belief systems. I then move on to explicitly evaluate the hypothesis that it is knowledge or information that primarily underlies the structure and stability of political attitudes by examining the effect of increases in information, and the interaction of such increases with existing levels of political interest, awareness and involvement, on both the structure of Political Belief Systems and the direction of individual issue positions.

This first chapter provides a brief overview of the literature addressing the political sophistication of the general public that emanated from Philip Converse's (1964) seminal article and reviews and evaluates the range of

perspectives that have emerged to counter the notion of a 'democratic deficit' caused by low levels of political knowledge and ideological sophistication. The importance of political knowledge or information as a determinant of political efficacy is discussed and simulation models (Althaus 1998, Bartels 1996) and deliberative polling (Fishkin 1991, 1995) are introduced as two alternative means of empirically assessing the impact of increases in information on the content and structure of political belief systems.

1.1 Political Sophistication and the Democratic Polity

The study of how people organise and utilise their political attitudes and beliefs has proved fertile ground for researchers in the social sciences. The multi-disciplinary nature of work in this area is testament to the substantive importance of a field which speaks directly to the question of how democracy works in practice. A politically informed electorate is axiomatic in most, if not all, conceptions of democracy and beliefs about high levels of ignorance amongst the mass public long provided the underpinning rationale for those who wished to deny the franchise to the 'masses' during the slow encroachment of suffrage. Before the development of the sample survey and systematic measurement techniques, which heralded the arrival of the quantitative social sciences in the early decades of the 20th Century, beliefs about levels of political sophistication in the general public were based on little more than commonsense supposition. With the advent of psychometric scaling techniques and the increasing sophistication of probabilistic survey methods, however, such beliefs were soon easily put to the test. Early studies in the United States confirmed these intuitive suspicions by revealing alarmingly low levels of knowledge in the general public about political institutions, parties, candidates and issues (Berelson, *et al.* 1954, Hyman and Sheatsley 1947).

Furthermore, and perhaps more importantly, levels of political awareness were not evenly distributed in the population but were systematically related

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to characteristics of individuals and groups: political ignorance was greatest amongst, *inter alia*, the working classes, the poor and the poorly educated (Campbell, *et al.* 1960, Delli Carpini and Keeter 1996, Hyman and Sheatsley 1947). Since then survey after survey has reiterated the impoverished state of political awareness amongst large sections of the electorate in both the United States, where the majority of such surveys have been conducted, and in other modern western democracies such as Britain, France, Canada, Germany, Italy and Spain (Baker, *et al.* 1996, Butler and Stokes 1969, Dimock and Popkin 1995).

Yet the critique of the political sophistication and awareness of the general public has not been limited to simple tests of political knowledge. During the 1950s and 1960s political scientists and social psychologists based at the University of Michigan began to elaborate the picture of the uninterested and uninformed voter (Campbell, *et al.* 1960). Philip Converse (1964, 1970, 1974, 1975, 1979) argued that, in addition to low levels of political knowledge, the public failed to organise their 'Political Belief Systems' (PBSs) in any sort of coherent or consistent manner. Through analysis of the American National Election Studies (NES) between 1956 and 1960, Converse revealed that a significant number of respondents could or would not place themselves on an abstract 'liberal-conservative' dimension and that only a very small proportion of the population were able to relate to and discuss political issues in terms of some overarching ideology or value dimension(s).

This was not necessarily problematic in and of itself but Converse went on to show that the attitudes and opinions reported by non-ideologues were so poorly inter-related and unstable over time that he was led to conclude that such 'attitudes' were in fact merely random, 'top of the head' responses, unrelated to any real underlying attitude – at least insofar as attitudes are standardly defined. The empirical evidence starkly revealed what came to be

known as the 'Black-and White'¹ model of nonattitudes: that despite providing substantive responses to survey questions, large sections of the public actually hold no underlying attitude across a broad range of political issues. A response alternative is selected at random to satisfy the demands of the interview protocol, hence the observed lack of longitudinal consistency on the same items and the low correlations between sets of items that Converse and his colleagues observed. Such findings confirmed what many had long feared about the discrepancy between democratic theory and practice and constitutes what Lupia and McCubbins have called 'the democratic dilemma': "that the people who are called upon to make reasoned choices may not be capable of doing so" (Lupia and McCubbins 1998).

Converse did not hesitate in spelling out the implications of his research for democracies and those who govern and live within them. He pointed to the fact that the base of the increase in Nazi support between 1928 and 1932 was drawn primarily from rural areas with high concentrations of uneducated and illiterate peasants: "It seems safe to conclude that the mass base of the Nazi movement represented one of the more unrelievedly ill-informed clienteles that a major political party has assembled in a modern state" (Converse 1964, 224). With low levels of political knowledge and no ideological framework with which to contextualise and evaluate election pledges, such a constituency was particularly prone to the empty promises and sloganeering of the Nazi propaganda machine.

Less dramatic, but perhaps equally serious for democracy, is the question Converse's findings raise concerning the ability of the electorate to decide which policies are in their best interests and to derive attitudes and vote accordingly. Despite the problems of defining what is meant by an

¹ The 'Black-White' model is so-called because respondents are classified in terms of a binary latent class – they are seen as either holding an attitude or not holding an attitude.

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individual's best interests (see later discussion of definitions of self-interest in section 2.8), it would seem uncontroversial to assert that when evaluating policy and candidate alternatives to that end, a well-informed individual will be better able to make the 'correct' decision than an ill-informed one. Indeed, recent research, to be reviewed in detail later, has begun to provide strong evidence that a hypothetically 'fully informed' electorate expresses significantly different preferences than a poorly informed one for both candidate and policy alternatives (Althaus 1998, Bartels 1996, Delli Carpini and Keeter 1996).

Since Converse's seminal contribution, the debate has essentially swung between those who broadly support his pessimistic conception of a politically disinterested and ill-informed public and those who, on various grounds, have challenged his position and argued that the electorate is, in fact, largely rational and responsive. Sniderman and Tetlock have described this as a debate between 'maximalists' and 'minimalists', "a maximalist interpretation emphasises the connectedness and consistency of belief systems; a minimalist, their lack of connectedness" (1986). Perspectives within the maximalist tradition range from those who base their position on methodological criticism of Converse's research: as being due to measurement error in the survey instruments on which his conclusions were based (Achen 1975, Erikson 1979), or the inappropriate use of quantitative correlational techniques (Lane 1972) through those who agree with Converse's conclusions but argue that changing times have led to large increases in ideological consistency in mass publics (Nie, *et al.* 1979). These accounts, while extremely varied in terms of the grounds on which they dispute Converse's position, are nonetheless united in that they all more or less accept the basic position that political awareness or sophistication – however one cares to label it – is a 'good thing' – knowledge of politics and a coherent political outlook are beneficial to both the individual and society. Converse and those who share his position – they argue – have

merely failed to prove the case that the general public really do lack these attributes.

A second level of critique though denies even the basic assumption of the importance of an engaged and politically aware citizenry. The underlying rationale of these perspectives is that the importance of political knowledge is exaggerated due to an over-simplistic view both of how individuals make sense of politics and of how democracies actually function in practice rather than in relation to some normative ideal. In the following sections of this chapter I provide a brief overview of the main strands of democratic theory and the role accorded in its various manifestations to the political engagement and awareness of the mass public, before moving on to a review of the various grounds on which the importance of a politically well-informed citizenry has been challenged.

1.2 Political Information and Democratic Theory

An informed citizenry is often taken as a *sine qua non* of democratic theory, yet, as Dahl has noted, “there is no democratic theory, there are only democratic theories” (Dahl 1956, p. 1). While most normative models of democracy require a politically informed and involved citizenry, other, more descriptive approaches have seen widespread political ignorance as largely unproblematic. Thus, while space clearly precludes a detailed review of theories of democracy, a consideration of the main themes will serve to place the arguments presented later in this thesis within the broader context of general political efficacy and emphasise the practical importance of the debate.

Modern notions of democracy can be traced to the development of new forms of government and political representation that emerged in the Greek city states during the fifth century BC. Indeed, the word democracy itself is derived from the Greek words *demos* (people) and *Kratos* (rule) and is taken to

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mean, in its original Greek sense 'rule by the people' (from Judge 1999, p. 2). Prior to this political transformation, government had consisted of a mixture of monarchic, oligarchic and aristocratic structures. Central to the Athenian idea of citizenship was a direct involvement in legislative and judicial decision making. The public good was therefore ensured by making the governed and the government one and the same, effectively vetoing the pursuit of limited or sectional interests. Clearly, such a constitution would require a highly knowledgeable and engaged public with a necessary requirement for every citizen "to acquire the knowledge of their city and their fellow citizens, from observation, experience, and discussion, that would enable them to understand the common good" (Dahl 1989, p. 19). In practice, such requirements were not so unattainable as they may appear to the modern reader, given that citizenship was restricted to a rather homogenous group of middle-aged Athenian males. Nonetheless, even under this restrictive notion, both Plato and Aristotle expressed grave doubts over the wisdom of relying on ordinary citizens to make the decisions of state due to fears over their moral and intellectual competence (Judge 1999).

Such a model has, however, been criticised for being an unattainable ideal in the modern world²: the political landscape has become unmanageably large and far too complex for such a system to work at all, let alone with any degree of effectiveness. The sheer number of decisions to be made and offices to be filled in a modern nation state effectively precludes widespread civic participation in government. In recognition of such logistical constraints, liberal democratic theorists such as Locke, Bentham and the two Mills moved toward more representative conceptions of democracy which, if perhaps not living up to the Athenian ideal, were seen as the closest *practical* alternatives.

² Indeed some authors have argued that the Athenian model was some way short of ideal itself, in its concessions to majority decision making and the use of Council for determining the Assembly's agenda (See Manin 1997).

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The rise to prominence of representative as opposed to participative models of democracy was engendered not just by the increasingly large and complex nature of the nation state but also by a transformation in economic systems and political economies (Ashcraft 1987, Tully 1979). With the development and growth of capitalist economies in the 18th and 19th centuries came a re-evaluation of conceptions of what constitutes the public good. In contrast to the natural social hierarchy espoused by Plato and Aristotle, the Lockean account of the social contract propounded the human right to life, liberty and the pursuit of material wealth and property. Within the social contract, individual citizens were seen as acting selfishly in pursuit of these goals (particularly the latter two) and the job of government was to ensure that, once attained, these things could not be taken away from them by other, selfishly motivated individuals (Judge 1999). The utilitarianism of Bentham and Mill, while maintaining that the motivational instincts of individuals were essentially selfish³, incorporated into government a further guiding principle: the need to ensure the greatest happiness for the greatest number as opposed to merely protecting existing propertied interests.

The confluence of these forces resulted in theories of democracy in which the primary, if not the sole, element of citizenship was participation in the election of representatives. As such, elections were to act primarily as a safeguard against the natural tendency of the executive and legislature to act in their own, rather than the public interest. Representative forms of government, however, also held out the further possibility that, in addition to acting as a check on tyrannical or self-interested legislatures, elections might afford citizens the opportunity to choose those individuals best qualified to hold

³ The pursuit of selfish interests should not necessarily be seen restrictively as synonymous with the pursuit of personal wealth and resources, as it may equally well be equated with an individual's desire to pursue more communitarian or altruistic aims (see Ashcraft 1987).

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office and most likely to pursue policies in line with their best interests, a sort of natural selection of those 'fittest' to govern. Thus, despite being a 'weaker' form of democracy, representative government still requires a citizenry equipped with at least basic levels of political understanding. True, the informational requirement is not considerable in comparison with Athenian and other participatory models but certain basic competencies must nevertheless be present in order for a polity based on indirect decision making to function effectively.

Yet do even these less restrictive, representative forms of democracy perhaps still expect too much of the electorate? Is it really necessary for each and every citizen to know the names of their representatives and the positions they hold across the major issues of the day for a democracy to function properly? If this were so, then how has twentieth century western liberal democracy managed to operate in an apparently healthy state in the face of the seemingly incontrovertible evidence of mass political ignorance? As a resolution to this problem, several theorists have argued that, rather than developing normative models derived, usually, from the starting point of Athenian democracy, a more useful approach is to look at how democracy actually works in practice. Within such a framework, the 'paradox' disappears and normative models of democracy rather than the citizenry become the villain, "the most disastrous shortcomings of the system have been those of the intellectuals whose concepts of democracy have been amazingly rigid and uninventive" (Schattschneider 1960, 135-136).

Early 'descriptive' theories of democracy are typified by the work of Schumpeter (1943) and Schattschneider (1942) who dismissed the liberal principles of the 'common good' and the 'will of the people' as romantic fallacies. Developing his idea of 'competitive elite democracy', Schattschneider argued that democracies did not need an informed or involved electorate. The role of the citizen in the functioning of the polity was strictly limited to an

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occasional mandatory provision at election time. Democracies were run by competent elites who gained and maintained power by performing satisfactorily in office and not giving in to tyrannical tendencies. In some respects the ignorance of the mass of the electorate was seen as advantageous through its role in "cushioning the shock of disagreement, adjustment and change" (Pateman 1970, p. 7).

Akin to Schattschneider's descriptive approach but more positive in its evaluation of the role of the citizen was the development of theories of pluralistic democracy, most notably in the work of Robert Dahl (1956, 1961). While sharing Schattschneider's view that liberal democracy held an unattainably idealistic view of the role of the citizen, Dahl argued that, although citizens may not be political polymaths, they are nevertheless able and motivated to act on single, or at least small clusters of issues. They exert political influence through narrowly defined organisations such as trade unions, community associations and single issue pressure groups. Democracy is therefore 'rescued' from the ignorance of the public by the fact that, in the aggregate at least, the public is rational and involved in the political process, despite being largely unaware of, or uninformed about the broader political landscape.

Yet the solution of the competitive elite perspective seems to go too far in its complacent rejection of the need for at least some weak form of civic participation. For it is surely a move too far away from the basic tenet of democracy being 'rule by the people' to accept governance by an elite clique unfettered by the concerns and aspirations of the broader electorate. It presents a patronising and patriarchal view in which the ruling elite knows what is best for the masses and acts accordingly. Quite apart from the openness to abuse that such a system presents, it is entirely unclear what mechanisms the executive would or should use to determine what the best interests of the public actually are. And if the electorate is afforded a role in determining the

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make up and direction of the executive within the competitive elitist account – through, for example, the influence of opinion polls, focus groups and other measures of public opinion - then is this descriptive approach really any less normative than the liberal democratic theories that it seeks to critique?

Likewise the pluralist and neo-pluralist approaches of Dahl and others (Lindblom 1977, Truman 1951) assume a model of voting in which each individual acts as if they were participating in a referendum, evaluating candidate and party positions in terms of only one or some small subset of issues. Notwithstanding the fact that pluralist accounts of democracy still require a significant amount of public knowledge, individual voting calculus in referenda is quite different from that found in general elections. In the latter instance, one is voting for a candidate on the basis of, not just one but of all the things they might do in office. As such it is far from certain that a system in which groups of 'experts' vote on the basis of single issues will, in the aggregate, result in a general election outcome which maximises the best interests of either the aggregate public or the individual voter.

Barber (1984) has characterised models of democracy as denoting either a 'thick' or a 'thin' role for the citizen. In this section I have provided a brief review of some of the main strands of democratic theory, ranging from the 'thick' citizenship espoused by Athenian and subsequent participative democratic theorists, through the 'thinner' accounts provided by classic liberal notions of representative democracy to Schumpeter's competitive elite perspective where the role of the citizen is so thin as to be almost non-existent. Yet despite the historical progression toward a less and less active role for the public in theoretical accounts, it nevertheless seems clear that, so long as we maintain the basic definition of democracy as being somehow linked to the notion of 'rule by the people', then the jury is still out on whether an uninformed citizenry 'matters'. Even the weaker forms of citizenship outlined in representative and pluralistic accounts still require the sorts of basic

information that countless studies have shown large sections of the public to be lacking (Delli-Carpini and Keeter 1996). The increasing proliferation and technical sophistication of measures of public opinion and their influence through the media on the direction of government policy also suggests that scepticism about the importance of how and what citizens think about politics is fast becoming a dangerous and anachronistic position.

So how is the paradox of democracy to be solved? Perhaps, as Delli-Carpini and Keeter suggest "the paradox itself is illusory - to the extent that citizens are uninformed, the system *is* less democratic" (1996, p. 49). Thus, democracy is not an all or nothing category in which a polity either is, or is not democratic but operates as a kind of descriptive continuum such that different systems of government and social organisation can be regarded as either more or less democratic in relation to alternate social structures. Crucially, such a view implies that, not only can alternative political systems be seen to be more democratic than others, but also that within a single polity the democratic process may function more effectively for certain individuals than it does for others.

By democracy 'functioning more effectively' I mean that some individuals are better able to affect the political decision making process to their own future advantage than other individuals. How might such an inequality be related to political knowledge? Well, to the extent that 'good decision making requires good information', we might expect that people with more information about politics are better able to form political preferences that accurately reflect their own best interests. This is because, with greater amounts of (accurate) information, we are better able to assess the likely outcomes of alternate courses of action and to determine which are most consistent with our individual and group preferences. And if this is the case, the adequacy of theories of democracy which discount the importance of a politically informed citizenry is seriously called into question. Later in this chapter I discuss

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methods of assessing empirically the extent to which the structure and direction of political attitudes are affected by an individual's level of political knowledge. First however, the discussion moves on to other areas in which it has been asserted that rational political judgements can be made in the absence, or near absence, of information.

1.3 Political Information and Voting Behaviour

In relation to theories of democracy, models of voting behaviour may in some respects be considered as the other side of the same coin; while the former have been concerned with defining and evaluating different systems of government in relation to some normative model or other, the latter have been focussed on how individuals actually make political judgements and form political preferences – the social-psychological as opposed to the macro-sociological level of analysis. The focus here then, has been on isolating and explaining the social and psychological factors that lead individuals and groups to support particular policies, candidates and parties rather than others. In the following sections I provide a brief over-view of such perspectives and discuss the role that each accords to knowledge or information in the political calculus of individual voters.

1.3.1 Identity or Rational Choice?

In the face of the apparently low levels of political sophistication unearthed by the first systematic studies of electoral behaviour, researchers at the University of Michigan (who had conducted the surveys), were left trying to explain the anomaly of low electoral volatility. If people were uninformed and inconsistent about political issues, candidates and party policies, why were

levels of net volatility⁴ between elections so low? In *'The American Voter'* Campbell et al (1960) developed the idea of Party Identification to explain this individual and aggregate level stability in vote choice. They argued that, due to the general lack of interest in politics and the costs to the individual of acquiring detailed political knowledge, people relied instead on developing an affiliation with a particular political party to guide them at elections. Once developed, this affiliation proved long-lasting and resilient, acting as the major force underlying the stability which characterised American politics in the 1950s.

In support of their theory they provided survey data to show that large proportions of the electorate reported being 'strongly' or 'very strongly' identified with a particular political party and, furthermore, the stronger the reported identification, the more likely an individual was to vote for the same party in successive elections. Those who reported no partisanship at all were most likely to switch between parties from election to election. Party identification, argued Campbell et al, developed during adolescence and was most likely to be absorbed through family and other key social networks. Further empirical support for this socialisation hypothesis was provided by the finding that one of the strongest predictors of current vote was parental party affiliation. Once an individual has voted for a party once, the likelihood of them becoming a partisan supporter increases as party identification solidifies through a process of self-labelling. The party then acts as a sort of ideological orientation mechanism through which new information can be weighed up and evaluated in addition to providing a lead in terms of policy preference:

⁴ Net volatility refers to the change in the aggregate distribution of the vote between parties between elections. Overall volatility denotes the proportion of the electorate that switched votes between elections (Heath *et al* 1991).

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"Identification with a party raises a perceptual screen through which the individual tends to see what is favourable to his partisan orientation. The stronger the party bond, the more exaggerated the process of selection and perceptual distortion will be"

Campbell et al (1960, p. 133)

In Britain the concept of party identification was picked up and developed by Butler and Stokes (1969, 1971, 1974). Through analysis of the time series of British Election Studies they uncovered a similar picture to that found in the United States of apathetic and uninformed voters in conjunction with a more or less stable share of the vote across parties through time. They developed the concept of 'partisan-self image' which, although essentially the same as Party Identification, was more rooted in the social class cleavages that had always been a more powerful force in British political life than in America. Voters aligned themselves with particular groups which shared the same social and economic interests and parties emerged as their natural representatives. Parties were therefore seen as inextricably linked to class interests and class membership became the primary determinant of party affiliation in the Butler and Stokes model of voting behaviour.

Yet, as with the 'thin' role for the citizen discussed in section 1.2 - and notwithstanding the obvious problems such models have in explaining short-term fluctuations in political allegiance (Crewe 1974, Heath 1991, Himmelweit, *et al.* 1985) - identity based models of political choice are also unsatisfactory as a means of negating the importance of an informed electorate. Not only do they provide no real protection against elite tyranny, they also offer a procrustean and inflexible basis for the derivation of political preferences. So, while identity based models may provide an accurate account of how many people actually do derive their political preferences, we can be far from certain that an individual who supports a particular party through mechanisms of social identity would still do so if they had greater knowledge of the true

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range of policy alternatives. Evidence indicating that better informed individuals are more likely to vote on the basis of issues (Delli Carpini and Keeter 1996, Heath and McDonald 1988) also suggests that developing one's political preferences through long-term identification processes is likely to be a poor substitute for more rational choice based strategies. If it weren't, the better informed would no doubt use it.

1.3.2 Information Short-cuts and Cognitive Heuristics

In all walks of life, people frequently use information short-cuts or cognitive heuristics and 'rules of thumb' in order to make a decision about a course of action which would entail a good deal of time and effort to become 'fully-informed' about personally. Recourse to such time and labour saving cognitive devices is "an inevitable feature of the cognitive apparatus of any organism that must make as many judgements, inferences, and decisions as humans have to" (Nisbett and Ross 1980, p. 18). Downs (1957) and Key (1966) both pointed out that, due to the high opportunity costs of being fully informed about politics, the *rational* citizen would actually remain uninformed and use strategies of "low information rationality" (Popkin 1991) in order to determine their own candidate preferences and positions on particular issues. Such strategies tend to rely predominantly on following the lead of some trusted person or group with whom an individual voter believes themselves to have common interests or beliefs. I may not know the position of a particular party across a range of specific policy issues but if I know they are supported by my trade union, this will prove sufficient information to conclude that they are the party I too should support. Sniderman Brody and Tetlock argue that such strategies enable the public to make rational political choices despite their apparent political ignorance:

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"Citizens can compensate for their limited information about politics by taking advantage of judgmental heuristics. Heuristics are judgmental shortcuts, efficient ways to organise and simplify political choices, efficient in the double sense of requiring relatively little information to execute, yet yielding dependable answers even to complex problems of choice".

Sniderman et al (1991, p. 19)

Indeed, such strategies are often implicit within the expressive theories of voting behaviour discussed in section 1.3.1. Developing a partisan self-image allows us to follow the lead of a political party which we feel confident has the best interests of ourselves and those from similar social groups at heart. More recent theories of low information rationality have, however, looked beyond the confines of political parties as opinion leaders, to examine the extent to which factors such as media consumption (Iyengar and Kinder 1987), affiliations with other organised social and community groups (Lupia 1994, Lupia and McCubbins 1998) and following the lead given by political elites (Brody 1991) are able to act as proxies for encyclopaedic knowledge. For example, Lupia (Lupia 1994) shows that, even if respondents were uninformed about the details of a referendum on motor insurance, they could still make 'rational choices'⁵ if they knew the positions of relevant interest groups.

In a different vein, Milton Lodge and his co-workers have developed a cognitive model of information processing which, they argue, shows that people may not need to possess databanks of political knowledge in long-term memory in order to hold rational and informed political opinions (Lodge, *et al.* 1989, McGraw, *et al.* 1990). Drawing on recent developments in cognitive psychology (see Hastie and Park 1986), the basis of this line of argument is that

⁵ Rational choice being defined here as choices no different from those made by fully informed respondents.

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people process information “on-line”, updating attitudes immediately as new information comes in but not storing this new information in long-term memory. Using laboratory studies Lodge and Steenberg (1995) show that new information significantly altered subjects’ candidate evaluations despite their later being unable to recall the specifics of the information they had received.

“Do heuristics solve the democratic problem of miserably informed citizens? No.” concludes Kinder (1998, p. 786). For, firstly, despite the reduction in necessary levels of knowledge relative to traditional rational choice models, much of the information upon which such short-cuts are based is precisely what much of the public have repeatedly been shown to lack. For example, using media or other sources of elite opinion leadership involves knowledge of, *inter alia*, issues, issue stands, reputations of public figures and groups in addition to more general information about important issues of the day. So, while such studies may show that efficient, low-information rationality is *possible*, they have not really demonstrated its *widespread* prevalence. Secondly, the fact that the key element in most information short-cut models involves *following* the opinion of others is problematic because it specifies a polity in which a social and intellectual elite are left to govern, free from the constraints of the will of the people. If the mass of the public are merely following elite, or other opinion leaders, then where is the protection against mis-information whether it be deliberate or not and how can the performance of the incumbent party be effectively evaluated and directed by the entire populace as opposed to just some section of it?

This connects with a third objection to those who propose low-information rationality as a ‘solution’ to the problem of widespread political ignorance: exactly how valid and efficient are these cognitive strategies? Indeed, much of the research into the use of heuristics and information short-cuts in cognitive psychology has focused on the errors and biases that such heuristics can produce (Kahneman and Tversky 1972). Even though most of these heuristic

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based models show that choices can be made without large amounts of information, they also show that their effectiveness increases with greater levels of knowledge (Delli Carpini and Keeter 1996). For example the “on-line” information processing work of Lodge et al showed that if subjects were warned they were about to receive information, political ‘sophisticates’⁶ were most likely to use on-line processing and, significantly, that if no warning were provided, this group were also most likely to make use of information stored in long-term memory in making their evaluations (Lodge, *et al.* 1989).

Therefore, arguments that such ‘cognitive rules of thumb’ can act as adequate replacements for general political knowledge and sophistication are unconvincing. They fail to provide for a satisfactory ‘watchdog’ role over the legislature in their reliance on opinion following, they require certain basic levels of information that large sections of the public lack, they do not necessarily lead to valid decisions and they do not function equally effectively for all citizens but seem to operate more effectively for the more politically sophisticated echelons of society. So how then do we explain the responsiveness of public opinion and voting behaviour to short and medium term fluctuations in the political and economic landscape? A final approach to be addressed, and one that is crucial to the central line of argument of this thesis, is that, despite individual level instability in opinions and low levels of political sophistication, the process of aggregation *per se* results in a mass public which is capable, in its entirety, of instrumental political decision making.

1.3.3 Rationality through Aggregation

Aristotle first ventured the notion that through aggregation alone public opinion could become rational and ‘good’, arguing in pre-Gestalt days that

⁶ Defined as those subjects with high scores on a political knowledge quiz.

“the many, no one of whom taken singly is a good man, may yet taken all together be better than the few, not individually but collectively” (Aristotle 1962, p. 123). Although ambiguous as to the precise mechanisms through which aggregation achieved this effect, later applications of probability theory supported this early position. Condorcet (1785 (1972)) proved mathematically that in a jury of equally (poorly) informed individuals, the probability of coming to the correct verdict increased linearly with the size of the jury (see Miller 1986). However, as is usually the case when mathematical equations are used to explain human social behaviour, the limitations of Condorcet’s theorem soon became apparent. Most notably, the model assumes that all ‘errors’ are random and uncorrelated which is particularly unlikely in the area of either jury deliberation or voting behaviour. For example any ‘sources of error’ (say, a particularly persuasive barrister or a partisan newspaper) are unlikely to produce self-cancelling errors but, instead, errors which compound each other (see Berg 1993, for a fuller account).

Less statistically complex but equally supportive of the rationalising influence of statistical aggregation is the idea that, due to the self-cancelling effects of random responses from uninformed voters, rational public opinion emerges untarnished by the uninformed opinions or votes of the politically ‘incompetent’ sections of society (Page and Shapiro 1992). This idea is supported by a broad range of studies (Gelman and King 1993, Schuman, *et al.* 1985, Zaller 1991) which have shown public opinion in the aggregate to be “responsive to social, economic and political change - often exquisitely so” (Kinder 1998, p. 799). In the language of signal detection theory, the ‘signal’ of the informed voters emerges untainted by the ‘noise’ of the uninformed (Converse 1990).

Notwithstanding the difficulties of establishing what is meant by a ‘rational response’ in aggregate public opinion to changes in the social, political or

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economic landscape⁷, the rationale of such approaches appears seriously flawed. For its logic, at least insofar as it is used to allay concerns over mass political ignorance, rests on the assumption that, had those providing the 'noise' been better informed, their opinions would have made no difference to the distribution of votes or measures of political opinion. Thus, so long as there is no systematic bias in aggregate opinion emanating from the uninformed, we are safe in the hands of the rational and informed portion of the electorate.

However, while this may again be a reasonably accurate representation of the dynamics of aggregate political opinion, the problem with the argument is that we cannot be in any way certain, or even very confident, that the errors would remain self-cancelling were the politically unaware to become better informed. As Delli Carpini and Keeter put it, "in all theories that depend on the few to speak for the many, the representativeness of the voices that emerge out of the din produced by the collision of ignorance is critical" (Delli Carpini and Keeter 1996, p. 44). For, essentially, the aggregation 'solution' rests on the assumption that the 'random' votes or responses of uninformed citizens are the same as those they would have expressed had they been better informed, all things being equal. Yet what empirical evidence is there to suggest that levels of political information are independent of vote choice and issue position? Anecdotal at least, it would seem strange to argue that increased levels of political knowledge will have no impact on an individual's position on political issues or on candidate preferences. Or, more importantly, that any such effects will be random and, hence, self-cancelling amongst the section of the public who initially hold no real opinion on particular issues, or whose opinions are based on very little information.

⁷ For example Page and Shapiro (1992) cite the example of the fabricated missile gap which falsely led public opinion to support the Kennedy candidacy in 1960.

In all three of the positions discussed above, then, the key factor which sustains their denial of the importance of a politically informed electorate is the assumption that a lack of political knowledge ‘doesn’t matter’ – that, in the aggregate, publics with low levels of information would have the same political preferences and make the same political choices that they would were they better informed. Such perspectives, however, seem to be based on little more than speculation and quite general historical observation. Recently, however, a growing number of studies have begun to look at this question empirically.

1.4 Simulating a ‘Better Informed’ Public

Bartels (1996), Delli Carpini and Keeter (1996) and Althaus (1998) have all used regression based models to estimate the distribution of public opinion on particular issues and candidate preferences for ‘fully informed’ publics. All found that, controlling for a broad range of important background variables, the opinions of informed and uninformed voters were significantly different. Imputing the information levels of the best informed for the least informed respondents and re-estimating support for presidential candidates and positions on individual policy questions, revealed large discrepancies at the individual level which, while diminished through the effects self-cancelling, nonetheless, remained significant in the aggregate.

Modeling the outcomes of the last five US presidential elections Bartels, for example, finds that incumbent presidents did five percentage points better, and Democratic candidates did almost two percentage points better, than they would have had voters been ‘fully informed’. Bartels argues that the assumption that low-information rationality is effective (i.e. that citizens are able to come up with rational issue positions and candidate preferences in the absence of relevant information) is “particularly seductive because it allows analysts to proceed to the (arguably) more tractable question of *how* they

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(heuristics)⁸ work, which in turn seems to provide support for the unsubstantiated claim that they do, in fact, work” (Bartels 1996, p. 198).

And it is not only in the area of electoral choice that this question is important. In modern democracies the growing influence of opinion polls on policy making (Herbst 1998) means that the uninformed may be increasingly disenfranchised. Both Althaus and Delli-Carpini and Keeter have shown significant shifts in opinion across a range of issues at both the individual and aggregate level in a simulated ‘fully informed’ public. Delli-Carpini and Keeter also maintain that these shifts can be seen to move opinion more in line with individual and group interests (Delli Carpini and Keeter 1996).⁹ The problem is further exacerbated by the un-informed being less likely to participate in a survey in the first place and less likely to give an opinion even if they do (Althaus 1996, Krosnick and Milburn 1990). Althaus summarises the situation thus:

“As a result, the interests of respondents who are relatively well informed may come to be more accurately reflected in measures of collective opinion. In other words, such measures may reflect the needs, wants, and values of whites better than those of blacks, men better than women, and the rich better than the poor”

Althaus (1998, p. 547)

Considering the significance of such conclusions, it is indeed surprising that so little attention has been paid to the issue of information effects on both individual and aggregate level political preferences. In contrast to the

⁸ My addition.

⁹ For example, the less well-off were more likely to support government welfare initiatives and women were more likely to support ‘pro-women’ policies.

repeatedly voiced concerns over low voter registration and turn out¹⁰ and their impact on electoral outcomes, low levels of political knowledge and awareness remains largely an empirical non-issue. Within public life, this state of affairs, is undoubtedly due to an implicit assumption that 'while times are good', the provision of the opportunity to vote *per se* is sufficient to maintain democratic accountability, or that voters somehow manage to muddle through using heuristics, opinion leadership and the like but, as Bartels points out, the lack of attention paid to this issue within the field of political sophistication research is surprising:

"What is striking is that political scientists have done so little to investigate empirically the electoral consequences of voter ignorance. If those who have viewed a well-informed electorate as crucial to the functioning of democracy have been too little burdened by the scientific demand for supporting evidence, the same could be said for those who have viewed the political ignorance of the average voter as largely or wholly irrelevant".

Bartels (1996, p. 195)

1.5 Deliberative Polls

A very different approach toward an understanding of the role of information on political opinion has been introduced by James Fishkin in the United States, Australia and Britain (Fishkin 1991, 1995). Fishkin has developed the notion of the 'deliberative poll', the basic methodology of which involves interviewing a randomly selected sample of individuals on their views on a particular political issue or range of issues before selecting a representative sub-sample to participate in a weekend of 'balanced' briefings by experts, discussion

¹⁰ The low turnout in the 1999 UK European Parliament elections, for example, led the Observer newspaper to call for voting in the UK to be made compulsory.

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amongst poll participants and an opportunity to put questions to both academic and other experts as well as politicians. The sub-sample is then re-interviewed at the end of the week. Fishkin argues that this method of polling produces meaningful opinions which are representative of what the broader electorate would think, were they better informed and motivated to think about the issues:

"A deliberative poll...has a recommending force: these are the conclusions people would come to, were they better informed on the issues and had the opportunity and motivation to examine those issues seriously. It allows a microcosm of the country to make recommendations to us all after it has had the chance to think through the issues"

Fishkin (1995, p. 162)

The results of the polls that Fishkin and his colleagues have thus far conducted across a broad range of topics confirm the general findings from the simulation models discussed above – information has a significant impact on political attitudes at both the individual and the aggregate level. Indeed, in terms of the actual direction of effects, a number of similarities can be seen in the findings of these two very different methodologies (Althaus 1998). This would seem to pose critical questions for those who seek to downplay the importance of an informed electorate and reawakens fears over the democratic deficit caused by a poorly informed and unengaged public. While the general tenor of the political sophistication debate over the last ten to twenty years has been one in which the rationality and responsiveness of the electorate has been emphasised (Lupia, McCubbins and Popkin 2000), we are perhaps now beginning to see a return to the more normative concerns of the Michigan school (Bartel, 2000).

1.6 Summary and Conclusions

In this chapter the concept of political sophistication was introduced and the long-standing debate concerning nonattitudes and the general political competence of the public and how this relates to the effective functioning of democratic forms of government was discussed. It was argued that weaker 'non-normative' theories of democracy and 'low-information rationality' models of voter choice, while perhaps presenting an accurate assessment of how most voters actually decide, fail to convince that such strategies are an adequate replacement for informed, rational choice. In addition to theoretical and normative concerns over the utility of such perspectives, empirical research was introduced which calls directly into question the ability of such strategies to act as effective surrogates for informed choice. Results from deliberative polls and simulation models suggest that the distribution of public opinion and voter choice would be significantly different were the public better informed. In the next chapter a more detailed examination of the political sophistication debate will be laid out and key theories and concepts to be utilised in the remainder of this thesis will be presented before turning to the empirical analyses of chapters three to eight.

2 POLITICAL SOPHISTICATION: THEORY AND MEASUREMENT

In chapter one a general introduction to the focus of this thesis was provided and Philip Converse's nonattitude perspective was briefly summarised and placed within the context of democratic theory and models of voting behaviour. Recent research was also discussed which suggests that widespread discrepancies in levels of political awareness and engagement amongst the general public might lead to divergences in the extent to which individuals and groups are able to derive political attitudes and preferences which correspond with their best interests. In the remaining chapters I employ a range of empirical analytical techniques in order, firstly, to establish the extent to which cleavages in political sophistication actually do exist within the British public. Secondly I shall assess the validity of claims that such discrepancies result primarily from differences in levels of political information and, thirdly, that were differences in political awareness to be controlled for or removed, aggregate public opinion would be altered and the low internal cohesion and longitudinal consistency of political belief systems within certain sections of the public would increase to levels found amongst political 'elites'. Before turning to empirical analysis though, it is necessary to present a more detailed account of the nonattitude thesis and to examine how this theoretically and methodologically complex area has developed since Converse's original treatment. In this chapter I shall also look more closely at some of the key constructs, operationalisations and terminology to be used throughout the remainder of this thesis.

2.1 Attitudes and Nonattitudes

Gordon Allport once famously described the concept of the attitude as "the primary building block in the edifice of social psychology" (Allport 1954, p.

43). Nearly fifty years on, it would be difficult, even for those opposed to Allport's particular brand of social psychology, to argue with this proposition (Olson and Zanna 1993). The general utility of the concept has pushed it from the preserve of a small band of psychologists and sociologists in the early decades of the twentieth century to being "the single most interdisciplinary concept in the social sciences" (Latane and Nowak 1994, p. 219). While there is still a good deal of debate over the exact meaning of the construct and the extent to which the affective, cognitive and behavioural aspects interact (see Eagly and Chaiken 1993), a general consensus does appear to have formed around the idea that an attitude is a relatively stable, favourable or disfavourable disposition toward a stimulus object. The following formulation is taken from Petty and Cacioppo's definitive historical review of the area and is used as a concise standard definition in a number of undergraduate texts:

"the term attitude should be used to refer to a general, enduring positive or negative feeling about some person, object or issue"

Petty (1981, p. 7)

The value of the attitude construct derives primarily from the inferred association between the expressed attitude and overt behaviour. Governments and commercial enterprises alike invest heavily in sample surveys that collect attitudinal data on the basis that (a) attitudes predict behaviour and (b) attitudes can be changed through targeted persuasive communications. To be sure, the controversy over the relation between attitude and behaviour (see McGuire 1986, Wicker 1969) has focused primarily on the situational, historical and measurement factors that influence the *strength* of observed relationships rather than on whether such a relationship actually exists (Fishbein and Ajzen 1975). The practical utility and relative ease of collecting attitudinal data has therefore led to a gradual formalisation of measurement techniques and their incorporation within the sample survey method.

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2.2 Attitudes and Survey Measurement

Key to the idea of the modern sample survey is the standardisation of procedures across sample elements – all respondents should, as far as possible, be asked the same questions in the same order, in the same manner, in the same basic environment (Sudman and Bradburn 1974). To the extent that standard procedures are not enforced, extraneous factors (i.e. all those unrelated to the underlying attitude) will increase the level of error, both random and systematic, captured by the measurement instrument. Standardisation of survey procedures, then, is seen as a means of ensuring that each sample member is responding to the same question in the same way – in the attitudinal domain, that they are faithfully reporting their true underlying attitudinal position rather than reflecting some idiosyncrasy of the interview context. This, though, introduces one important additional assumption into the theoretical rationale, namely that *every* respondent does in fact hold an attitude on the issue to which a particular question pertains. A closer look at textbook definitions of the attitude, however, makes it clear that this is not necessarily a very realistic or plausible assumption.

For unless we are to fundamentally reassess our conception of the attitude construct, in order to have an attitude toward “a person, object or issue” we must surely possess at least some simple form of information about the object of the attitude itself. Even recent attempts to move away from the idea of pre-existing, crystallised attitudes in favour of ‘on-line’ attitude construction models (Anderson 1981, Zaller 1992) still rely fundamentally on ‘bits of information’ relevant to the attitude object in determining an attitudinal position in whatever specific context. To take a contemporaneous example, how is it possible for someone to hold an attitude toward European tax harmonisation when they do not even know what ‘European tax harmonisation’ is?

Converse initially came to his non-attitude thesis, not in his capacity as an analyst, but during time spent as a survey interviewer (Converse 1974). Noting the unwillingness of respondents to use Don't Know response alternatives (which were perceived pejoratively as an admission of 'ignorance' rather than a truthful response) in conjunction with the often extreme behavioural manifestations of ambivalence and doubt when responding to political attitude items, Converse came to suspect that the 1-2% of Don't Know responses commonly observed on such questions¹¹ was "an underestimate of heroic proportions" (1974, p. 650). This hunch was confirmed by the subsequent inclusion of an 'opinion filter'¹² which saw the proportions claiming not to have an opinion soar to around 30% on some items (see Schuman and Presser 1981, for a full review of the effects of opinion filtering). Selecting an item about whether the provision of housing and power should be in state or private hands, Converse found that, despite there being virtually no aggregate change in the marginal totals across three waves of a panel survey, the across-wave correlation coefficient on this item was only 0.3 – indicating that massive 'churn' was occurring at the individual level, without any corresponding movement in the aggregate marginal frequencies due to true attitude change¹³.

¹¹ Until relatively recently it was common practice in survey organisations to train interviewers to pressure respondents into providing a substantive response rather than accept a Don't Know alternative.

¹² An opinion filter first asks respondents whether they have an attitude toward some object or issue before proceeding to elicit the attitudinal response.

¹³ That no true change should be apparent over time is an essential but often ignored element of the Black-and-White model. However, the idea that stable marginal frequencies equate to no true change is not strictly true, as perfect self-cancelling with true change could result in constant marginals. However, Converse also supported his no true change position with the fact that the correlation between attitude at time 1 and attitude at time 2 was the same as the correlation between attitude at time 1 and attitude at time 3, indicating that if true change was occurring, it was unrelated to the passage of time.

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As this analysis was performed on the sample excluding the 30% of respondents who had been filtered out after expressing no opinion, Converse was led to conclude that:

"Large portions of the electorate simply do not have meaningful beliefs, even on issues that have formed the basis for intense political controversy among elites for substantial periods of time".

Converse (1964, p. 245)

In choosing this particular item to form the centre-piece of his analysis, Converse was examining what he termed a "limiting case". By this he meant that it was something of an extreme example and that on other, more familiar or salient issues, the proportion of the population exhibiting nonattitudes would be smaller. Neither was it Converse's contention that the same individuals lacked attitudes across all issues but that "issue publics" – those holding true attitudes – formed around particular issues to the extent that they were interested, involved in and above all knowledgeable about a particular content domain.

Those with stable, crystallised attitudes in a particular policy arena may well be the nonattitude holders in another. However, despite the caveats and reservations that Converse expressed in delineating his nonattitude thesis over the years, the implications of even weakened versions of the theory are both serious and pessimistic in their implications. Not only do his conclusions call into question the wisdom and usefulness of collecting and analysing quantitative attitudinal data as an academic, governmental or commercial enterprise, they also raise serious issues concerning the even distribution of political efficacy within society as a whole. In the following sections I review the major challenges that have been made against the non-attitude thesis over the years in order to evaluate the validity of the arguments and methodologies

to be applied in later chapters in assessing the political competence of the British public.

2.3 Locus of Error in Attitude Measurement

That large proportions of the variance in survey items and scales can be attributed to measurement error has long been recognised in survey research (Lessler and Kalsbeek 1992) and its presence constitutes the foundation of perhaps the foremost line of criticism against the non-attitude thesis. Measurement error in surveys is defined as the discrepancy between the survey value obtained on a particular variable and the subject's true score on that variable (O'Muircheartaigh 1977, Sukhatme and Sukhatme 1970). It may be manifested in the form of larger standard errors, in biased estimates or a combination of both. The sources of survey measurement error are many and varied. Groves (1989) categorises the primary ones as being the interviewer, the questionnaire, the mode of data collection and the respondent.

A number of researchers have suggested that the lack of internal and longitudinal consistency between issue positions observed by Converse and others is due primarily to the first of these – the questionnaire – while the nonattitude thesis is premised on the fact that it resides in the last – the respondent. Pierce and Rose (1974), for example, in line with classic measurement theory, argue for a distinction to be drawn between attitudes as psychological entities and as survey measures of these entities. They contend that attitudes should not be regarded as points on a dimension but as latitudes or regions of acceptance or rejection – an idea originally popularised by Sherif and Hovland (1961). So, while people do in fact hold fairly stable and meaningful attitudes, their expressions of these attitudes are more labile and can be heavily influenced by context. It is this lability in attitude measurement rather than in the underlying attitude itself that is the cause of low inter-item constraint and temporal consistency.

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Similarly, Achen (1975, 1983, see also Erikson 1979) has argued that the poor construction and “vagueness” of the questions analysed by Converse were responsible for the nonattitudes he found and, by ‘correcting’ for the measurement error in the questionnaire items, associations between attitudes increase dramatically. Yet as Kinder (1983) has pointed out, the ‘error in the questions’ approach ignores some rather glaring anomalies. Firstly, the authors who adopt this line are all more or less silent on what it is that constitutes ‘vagueness’ in these questions (Smith 1984). To wit, comparing the correlations between the items Converse analysed to those of other, similarly worded questions reveals large differences in levels of constraint. The same is true of the degree of longitudinal consistency. If the error is in the questions, why do certain types of question (for example, about party identity) contain consistently less measurement error than others? One could suggest that it is simply a case of some questions being badly and some well written. However, such a line is difficult to maintain without being able to identify what is meant by ‘badly’ as opposed to well written. Questions on surveys like the NES have often undergone years of rigorous testing and development by teams of experts without any obvious indication of how they may be improved beyond their current format. Furthermore, and perhaps more damaging, is the non-random nature of much of this ‘measurement error’. While no clear and definitive picture has emerged of which respondent characteristics are strongly and consistently associated with higher levels of error variance in these types of political attitude questions, the error structure is, nevertheless, far from random (Jackson 1979). And to the extent that this is the case, the argument that measurement error purely *in the questions* is responsible for low inter-item associations becomes untenable. As Smith puts it:

“If a measurement error is correlated with attributes of the respondent, then at least to some extent measurement error is no longer just instrument error but is partly respondent error”.

Smith (1984, p. 226)

Finally, Luskin (1987) introduces a less direct, but equally persuasive line of reasoning to dissuade us from the 'error in the questions' approach. He draws on the 'fictive issues' literature (Bishop, *et al.* 1980, Hartley 1946, Schuman and Presser 1981) to demonstrate the willingness of respondents to provide responses to questions about non-existent issues, which, by definition, they cannot have thought about or hold an attitude towards¹⁴. Bishop *et al.* (1980), for example, found that more than a third of a general population sample in the US were willing to give their attitude toward a non-existent piece of legislation. Because providing responses to non-cognized issues is the crux of the non-attitude thesis, the fact that respondents are willing to do exactly that in such large numbers provides a strong counter-argument to the 'error in the questions' critique of the nonattitude thesis.

So, while the measurement error caused by vaguely worded or badly written questions is clearly an important factor in explaining the meagre associations commonly found between individual issue items, it is insufficient as an explanation of how the level of these associations is stratified within the population. It is implausible to argue that the vagueness of the questions does not affect political elites¹⁵ for, once measurement error is seen to vary systematically with the background characteristics of respondents, it ceases to be measurement error in the strict sense and becomes inextricably linked with the individual characteristics of the respondent. Evidence suggests that these characteristics are predominantly related to people's general cognitive ability

¹⁴ Many respondents in fictitious issue studies may be responding on the grounds that the non-existent issue *sounds like* a real issue about which they do hold an attitudinal position. However Kolson and Green (1970) have provided evidence to show that, such respondents notwithstanding, large numbers still respond to fictitious issues without any such contextual 'clue-taking'.

¹⁵ Whether 'political elite' be defined in terms of those involved directly in the political process, or less restrictively in terms of those who are interested in politics or support a political party etc.

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and their awareness of and interest in politics, which of course takes us back to the nonattitude perspective.

But, if measurement error is an insufficient explanation of Converse's findings then perhaps his results were merely a function of the political landscape at the time during which the data Converse studied were collected, ungeneralisable to the better educated and more media savvy electorate of today. As the PBSs of the public are, to a large extent, shaped and structured 'from above' by political actors in government and the media (Barton 1974, Sears, *et al.* 1978), perhaps the pessimistic conclusions concerning the public's political competence that Converse drew were more to do with the specific historical period studied than the fundamental nature of belief system organisation in the mass public.

2.4 Changing Times Changing Attitudes?

The idea that Converse's findings related only to the specific historical period he studied was the basis of a series of articles by Nie and his colleagues during the late 1970s (Nie and Anderson 1974, Nie and Verba 1975, Nie, *et al.* 1979). They argued that the period during the late 1950s, upon which Converse's conclusions were based, was a time characterised by political consensus and a lack of ideological polarisation in US politics. During such periods of political stability we should not expect the electorate to exhibit strongly held political attitudes and ideological thinking but, as the political landscape becomes more ideologically polarised, we should see an increase in the internal consistency of PBSs, of issue-based voting and of the use of ideological terminology in everyday political discourse. In the British context a similar hypothesis was proposed by Sarlvik and Crewe (1983), Franklin (1985) and later by Rose and McAllister (1986, 1990) who argued that a more sophisticated, volatile and issue conscious public was eroding traditional class-based ties in determining voter choice.

In the US this hypothesis was supported by analysis of data from the National Election Studies between 1956 and 1972 which showed marked increases in levels of issue constraint between 1960 and 1964. Indeed the associations between the time-series of individual issues studied by Converse had increased amongst the mass public to levels exceeding those found in the elite sample in his original study. This sudden increase in attitude constraint came at a time during which issues of race and poverty had taken centre stage in national life and a new, charismatic president was convincing the public that politics could make a difference¹⁶. With corresponding increases found in the proportion of respondents making Active Use (AU)¹⁷ of ideological terminology when discussing politics Nie and Anderson were led to conclude that

"We have located a substantial and widespread increase in the consistency of political attitudes in the post-1960 era and we have argued that this finding is indicative of the growth of a more ideologically oriented mass public"

Nie (1974, 580)

Nie and Anderson's account was soon to become the new accepted wisdom but this ultimately proved premature (Kinder 1998). For the increases in constraint upon which they had based their conclusions turned out to be largely artefactual consequences of alterations in question wording and response categories in the 1964 wave of the National Election Studies (Bishop, *et al.* 1978, Sullivan, *et al.* 1978). Unbalanced items which presented only one side of a particular issue and asked respondents to either agree or disagree were replaced with balanced questions in which both sides of the argument were presented before the respondent was asked to express their attitude. Experimental manipulations demonstrated that the change in question format

¹⁶ "Ask not what your country can do for you but what you can do for your country".

¹⁷ See section 2.7.1 for a fuller description of this measure of ideological sophistication.

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per se accounted for the vast majority of the increase in attitude constraint (Sullivan, *et al.* 1979).

Furthermore Bishop (1976) showed that Nie's measure of the salience of politics¹⁸ in the electorate as a whole had increased most markedly in the years between 1956 and 1960 – the period Converse had studied – and only modestly between 1960 and 1964 – the time during which they contended a large upsurge in political involvement and, hence, constraint had occurred. It also emerged that the apparent increase in the use of ideological terminology was due partially to a difference between Nie and Andersen's and Converse's coding procedure. What increase was left once the same coding frame was employed fell almost entirely in the category Converse labelled 'near-ideologues' which constituted those respondents who used ideological terminology but did not seem to understand it. Subsequent reanalyses which examined questions with an unchanging wording and format (Klingemann 1979, Smith 1989) found little or no change in the level of constraint, indicating that "despite profound changes in US politics through the 1960s, the structure of public opinion had hardly changed at all" (Kinder and Sears 1985, p. 666-7).

In Britain the parallel idea that voting behaviour rooted in social-class loyalties and identities was giving way to a more rational, issue based decision-making public (which by definition should have more stable and crystallised political attitudes) was also being comprehensively challenged. It was not class based voting that was in decline but the traditional class structure itself. Once changes in the relative proportions that each social class comprised in the electorate were held constant over time, the apparent increase in issue-based voting disappeared (Heath, *et al.* 1991).

¹⁸ Self-reported interest in the election campaign.

2.5 An Inappropriate Methodological Paradigm?

A number of opponents of the nonattitude thesis have argued that the methodology used by Converse, and for that matter by many of his critics, is simply inappropriate for detecting structural organisation of belief systems at the level of the individual. Foremost among such voices is that of Robert Lane (Lane 1973, Lane 1962, Lane 1972). Lane argues that Converse's methodology starts with a preconceived idea of what an ideologically structured PBS should be and when he fails to find it, concludes that none exists without bothering to look for other forms of organisational structure. Just because people do not use abstract ideological terminology when discussing politics, does not mean they do not structure their political beliefs in a coherent manner.

Converse's approach, argues Lane, is particularly likely to underestimate the ideological content of the belief systems of the merely inarticulate. Others have joined Lane in arguing that only by studying belief systems at the level of the individual can more idiosyncratic structures be uncovered (Bennett 1976, Conover and Feldman 1984, Hochschild 1981, Luker 1984, Marcus, *et al.* 1974) and that, by looking at aggregate correlational statistics we will only ever find structure amongst those who share the dominant ideological belief systems. Lane used in-depth interviews with a group of working-class men to show that, while not adhering to conventional systems of value structure, they nevertheless based their positions on individual political issues coherently in terms of "latent ideological structures...premise, inference, application" (Lane 1962, p. 9-10).

However, while the 'ideographic' approach of Lane and others makes a number of telling criticisms against specific aspects of Converse's position, when looked at in its entirety, the argument that low levels of constraint are merely indicative of idiosyncratic belief systems does not stand up. For while we might attribute low inter-item correlations and non-ideological terminology to idiosyncrasy and inarticulateness, why should we expect the attitudes of

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these groups to be any less stable over time? A key plank of Converse's argument is based on the high levels of longitudinal inconsistency which, in fact, served as the starting point for his 1964 article. If a substantial number of respondents provide ephemeral and labile responses to political attitude questions, inter and intra-item inconsistency is what we should expect to find. If on the other hand, as Lane protests, low inter-item constraint is caused not by non-attitudes, but by unusual and non-conformist belief system structures, there is no reason to expect any less stability over time. Yet this is precisely what Converse found when comparing his 'elite' sample data with that from the general public – not only were the items much more constrained in the elite sample, they also showed much higher levels of stability over time. Furthermore, the individual-centred approach has itself been criticised on the grounds that, through the discursive, constructional nature of the in-depth interview methodology the researcher "has not so much discovered the ordinary person's ideology as he has contributed to its momentary creation" (Kinder and Sears 1985, p. 669).

2.6 Measurement at the Appropriate Level

Are we measuring belief system structure at the appropriate level? This is a question that has been posed by a number of researchers seeking to rescue the mass public from the charge of basic political ignorance. In Converse's original treatment, positions on individual policy issues were seen to be related to one another only in an indirect manner through their common linkage to "some superordinate value or posture toward man and society" (Converse 1964). This relationship results from the hierarchical nature of PBSs and is illustrated in Figure 1 below. While no *direct* relationship may exist between, say, an individual's attitude toward a proposed political asylum bill and their stance on penal reform, the two attitudes may nevertheless be connected by dint of their common linkage to a more general value orientation regarding, say, civil liberties. Recent developments in PBS research have proposed that inter-item

or 'horizontal' consistency is not the appropriate measure of constraint and that, instead, we should be evaluating the extent to which idea elements are constrained 'vertically' by more general value dimensions.

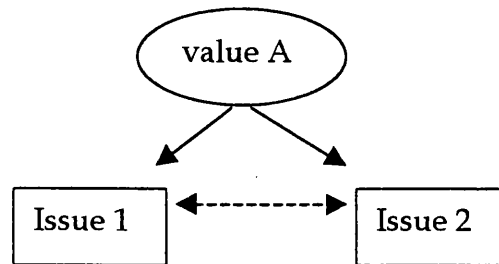


Figure 2.1 *Issue positions and Higher Order Value Dimension*

The idea of central or core values as general political orienting principles has a long pedigree and dates back at least as far as Tocqueville (Lipset 1959). The basis of this perspective is that, while people may not conceive of each individual political issue they encounter as representing an element within some integrated political ideology in the Marxist sense of the word, they may nevertheless be able to form an evaluative position toward it on the basis of its implications in relation to some strongly held value or belief (Rokeach 1973). Such 'core values' are deeply ingrained within the social and political fabric of society and, like the collective representations of Durkheim, are so pervasive and persistent that their presence may go largely un-noticed and unquestioned (Lane 1962). Being only weakly related to one another, these superordinate beliefs cannot be said to constitute an ideology in the more traditional sense but nonetheless serve as a meaningful framework within which individual attitudinal positions may be structured (Williams 1979).

Many different core values and beliefs have been mooted over the years, often with different names for what is essentially the same construct (see McClosky and Zaller 1984, for a full review) but in the political realm, those most frequently suggested centre around notions of freedom of the individual, the

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size and role of the state and economic individualism (Lipset 1959). To understand the ontological status of individual issue positions from this perspective, we must look to how these issues conflict or converge with people's core beliefs and values rather than how they are related to one another at the lowest level of the hierarchy (Sniderman and Tetlock 1986). Peffley and Hurwitz (1985, 1987), for example, use hierarchical confirmatory factor analysis to show that, while inter-item consistency may be weak to non-existent in specific policy areas, if we reconceptualise constraint as being the vertical relationship between general and specific attitudes, much higher levels of association are observed. Drawing on schema theory (Fiske and Taylor 1991) they contend that novel incoming information is nearly always interpreted in relation to more general pre-existing knowledge schemas and that, "from this perspective, attitude structure centers primarily on the linkages between abstract idea elements, where the former are assumed to 'constrain' the latter" (Peffley and Hurwitz 1987, p. 1100).

In the US, Feldman (1988) has developed a set of short scales to measure the dominant core beliefs within the American public. Finding that internally reliable scales representing 'equality of opportunity'; 'economic individualism'; and 'free enterprise' were strongly related to policy positions, incumbent performance and candidate evaluations, Feldman too argues that by analysing public opinion at the appropriate level (i.e. core beliefs and values) the public emerges as rational, coherent and structured in its political preferences. The issue is also one of measurement. In Britain Heath et al (Heath, *et al.* 1996, Heath, *et al.* 1993) have developed similar scales to those of Feldman which cover two major dimensions of the British political landscape: 'socialism/left v laissez faire/right' and 'libertarian v authoritarian' values. Heath et al make the point that most of the work showing low levels of attitudinal consistency within the mass public has been based on single item measures. They list the disadvantages of single item measures as being their inability to address the complexity of multi-faceted topics; their susceptibility to extraneous influences

such as question wording; and their lower levels of discrimination relative to multi-item scales. Finding internal reliability of 0.64 and 0.53 (Cronbach's Alpha) respectively¹⁹ in their short six item scales²⁰, Heath et al go on to show that respondents' positions on these value dimensions are significant predictors of both their attitudes toward the two main political parties and the likelihood of their participating in political protest. Taking this in conjunction with the levels of longitudinal consistency exhibited by these scales (Pearson's $r = 0.70$ between time 1 and time 2), the authors were led to conclude that:

"when examined in a more appropriate fashion the British electorate does have consistent and stable views on underlying value principles, which in turn would seem to be useful for explaining support for the main political parties both during and between elections"

Heath (1993, p. 107)

However, a problem with the core beliefs and values approach to reasserting the political competence of the mass public is that, methodologically at least, in the search for statistical evidence of inter-relatedness and stability it tends to lump everyone in together. The net effect of summing related items is to increase the amount of true score variance relative to random error variance in comparison to the ratio for each individual item. This is because, while the true score is systematic, the error component is random and therefore self-cancelling across items. To be sure, the effect of this aggregation is to enhance statistical associations relative to those obtained with single item measures, but can we be sure with this approach that we have really unveiled the core beliefs

¹⁹ The libertarian-authoritarian scale obtained Alpha coefficients of .60 in the 1992 and 1997 British Election Studies which had considerably larger sample sizes.

²⁰The scales were formed by recoding all six items so that 1 indicated a right/authoritarian response and 5 a left/libertarian response and then summing across items to give a scale ranging from 6 to 29 with a mean of 19.2 and a standard deviation of 3.7 for the left-right scale and a mean of 18.5 and a standard deviation of 3.2 for the libertarian-authoritarian scale.

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and values of the entire public and not merely some more sophisticated subgroup thereof – leaving the responses of the less politically aware lost in a collision of random noise? If the latter possibility were found to be the case, then we might be led to conclude that, rather than providing evidence for the underlying structure of the PBSs of the general public, the scaling approaches of the core beliefs and values perspective reveal exactly the opposite – that even when looked at in this more methodologically sophisticated manner, the belief systems of large sections of the public do not appear to be structured by even broad and general guiding principles such as deeply held values and beliefs.

Heath et al do in fact note this problem and find the over-time stability of their summed scales to be lower amongst the less well educated members of their sample. However, this analysis would seem insufficient to conclude that even the less politically aware members of society can be said to structure their belief systems according to these core values. This is because firstly, education has been strongly criticised as an indicator of political sophistication as it is too general an indicator of cognitive ability and largely unrelated to political involvement and awareness (Converse 1979, Wray 1979). Second, while looking at the over-time correlations across groups is useful for examining longitudinal stability, it passes over the prior and perhaps more important question of whether the items can really be said to form a single scale across groups differing in their level of political awareness. So, while the core beliefs and values approach helps to show that when appropriate steps are taken to correct for measurement error in survey items, enhanced statistical associations can be found between measured constructs, it cannot assure us of the political competence of the *entire* public.

In the sections above I have described the four main perspectives from which the nonattitude thesis has been challenged – measurement error, changing times, inappropriate methodology and inappropriate level of measurement.

And while all four can be said to raise legitimate concerns about Converse's somewhat dark conclusions about the political sophistication of the mass public, none of them on their own or taken in their entirety seem capable of convincing us that these conclusions are unfounded. In later chapters I conduct a range of empirical analyses to investigate the validity of the nonattitude thesis more thoroughly. Next, however, I turn to a discussion of the key concepts and terminology to be used in this thesis and how they have been operationalised and measured in the past.

2.7 Political Sophistication – Measurement and Terminology

Throughout this and the previous chapter I have repeatedly referred to political 'awareness' and other related concepts such as 'competence', 'involvement', 'engagement' and 'knowledge'. These terms have often been used more or less interchangeably to refer to specific aspects of the broader notion of political 'sophistication'. This very useful concept, which may be thought of as somewhat akin to an individual's political intelligence, has proved notoriously difficult to pin down and operationalise. It will therefore be beneficial to provide an overview here of the main definitions and operationalisations that have been proposed to inform the analysis and discussion of later chapters.

Political sophistication is essentially about cognition; how and what people think about politics defines the size and structure of their political belief system (PBS) which in turn determines the way that they evaluate political choices and interpret incoming political information. Luskin (1987) has argued that the three primary organisational dimensions of political belief systems are (a) size: the number of idea elements contained within the PBS (b) range: the breadth of coverage of the political domain (knowledge about a range of different policy areas rather than specialisation in one or just a few domains) and (c) constraint:

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the extent to which idea elements are structured hierarchically such that broader more inclusive values or beliefs organise positions on specific issues.

The first two dimensions are therefore primarily to do with political information and knowledge while the latter, although inextricably linked to the first two, is more concerned with how individual pieces of political information are structured into a coherent organisational whole. More information and greater internal integration of idea elements are indicative of greater political sophistication. More sophisticated individuals, it is proposed, experience greater political efficacy through deriving attitudes and partisan tendencies which are more in line with their own and with group interests. A range of measures have been developed to capture each of these different aspects of belief system structure. Correlational measures, for example, primarily tap the extent to which political belief systems are internally constrained, while measures of political knowledge are more reflective of the size and range dimensions. Another means of assessing the internal coherence of belief systems has been to study the abstract ideological content of people's political vocabulary. These approaches have been termed 'abstraction measures' and are discussed in more detail below.

2.7.1 Abstraction Measures

The basic idea behind measures of abstraction is to assess the extent to which people are able to use and relate to abstract principles of political reasoning such as 'left-right' or 'liberal-conservative'. One of the simplest approaches to measuring abstraction, referred to as ideological self-location, involves asking respondents to locate themselves and/or parties and candidates on graphical representations of these dimensions (Bennett, *et al.* 1979, Hikel and Segal 1973). A second approach, known as Active Use (AU) involves recording respondents talking freely about politics and then coding their verbatim speech to various Levels of Conceptualisation (LC) (Campbell, *et al.* 1960, Converse 1964,

Neuman 1981). Respondents can then be categorised by the extent to which they refer to and utilise higher order organisational principles in their political deliberation. A related method, also developed by Converse (1964) is known as the Recognition and Understanding (RU) measure. This requires respondents to identify the ideological position of a particular party and then to give reasons for this placement. Respondents are coded on the basis of correctness and ability to give adequate ideological justification for their choice. Measures of abstraction, then, speak most directly to the constraint and hierarchical organisational aspects of political sophistication.

The problem with this type of measure of course, is the validity of the operationalisations. Errors of classification may be of both the false-positive and the false-negative variety. As Lane's ideographic perspective asserts, it is eminently possible for someone to have a left or right wing political outlook without explicitly recognising it as such. The high proportions of respondents failing to locate themselves on traditional left-right self-placement scales fuel the suspicion that individuals with a genuine 'left-right' political outlook fail to label themselves accordingly. Follow-ups of ideological self-locations have also shown that respondents provide very vague and often factually incorrect definitions of the dimension they have located themselves on and fail to identify the correct positions of main political parties on the same dimension (Butler and Stokes 1969, Erikson and Luttbeg 1973).

As regards specific operationalisations of AU and RU, Smith (1980) has argued that these measures of ideological reasoning are very weak and suffer from a lack of reliability in the coding frames used. For example, just mentioning the word 'left' would categorise someone as an 'ideologue' without their having demonstrated any real understanding of the abstract concept. It is this concern over the extent to which use of ideological terminology is actually indicative of ideological thinking, that has led some observers to reject these measures on the grounds that "the words are epiphenomenal; it is the cognition behind

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them that matters” (Luskin 1987, p. 879). Furthermore, relative to other measures of political sophistication, abstraction measures are costly and time consuming to collect and have been rarely, if ever, used in Great Britain. Measures of abstraction, therefore, are not used as a measure of political sophistication in the empirical chapters of this thesis.

2.7.2 Correlational Measures

Correlational measures have been used extensively and in a wide variety of ways, to gauge the inter-connectedness of belief systems and form a central part of the analyses employed in this thesis. A detailed review and consideration of the problems and advantages of these techniques appears in section 3.2 so only the more general points will be covered in this section. More constraint between attitudes within the belief system, as indicated by correlational statistics of greater magnitude, is argued to be indicative of political sophistication. This speaks to both the information holding and the interconnectedness aspects of sophistication: the less an individual knows about politics the more attitudes will be weak, non-cognized and labile, which will in turn lead to attenuated correlations between attitude items due to the high proportion of random variance or measurement error in each attitude item. Additionally, to the extent that the individual does hold attitudes toward political issues but perceives each one in isolation and as unconnected, through higher order values, to other issues in the belief system, correlations between these items will also be of lower magnitude.

Thus, while there are a number of problems with the correlational approach, centring around unit and item nonresponse bias, response set effects and the use of inappropriate correlational measures, the approach nonetheless retains a useful role in that respondents with stronger, more stable attitudes, organised within a coherent hierarchical structure should, all things equal, exhibit correlations of greater magnitude between items. These analytic techniques form an integral part of the empirical work presented in this thesis and the

debate as to their proper use and interpretation is addressed in detail at various points throughout chapters three, four and five.

2.7.3 Longitudinal Attitude Stability

To the extent that an individual's attitude is weak, 'uncrystallized' or even non-existent, we would expect it to exhibit low over-time consistency. If we ask the same individuals the same question at different points in time and observe inconsistency, not only in the exact response alternatives selected but also in terms of the side of the issue they take, we may wonder if we are actually measuring anything 'real' at all. That attitudes are relatively stable and enduring psychological dispositions is usually taken as a fundamental definitional criterion. Yet massive instability in attitude responses was exactly what Converse found in his analysis of NES panel data between 1956 and 1960 and became the basis for his celebrated (or infamous – depending on one's viewpoint) 'Black-and-White' model of attitude holding. Converse argued that low levels of longitudinal stability was further evidence of the political ignorance of a large proportion of the US public, caused by the tendency to provide a random 'coin-flip' response to survey questions when people actually hold no real attitude.

Another possible cause of such high individual level volatility is true change in the respondent's opinion. However, Converse rejected this explanation on the grounds that marginal aggregate distributions remained virtually unchanged throughout the duration of the panel and because correlations between time 1 and time 3 were of the same order as those between time 1 and time 2, indicating that switching was independent of time between measurements²¹. This is not to suggest that true change is not the causal factor behind some of the longitudinal instability - such a position would clearly be absurd - but that

²¹ Theoretically, we would assume that more 'true change' should occur between time 1 and time 3 than between time 1 and time 2, all things being equal.

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with data showing little or no longitudinal change in marginal distributions, it is unlikely to be anything more than a trivial influence on such large amounts of individual 'churn'.

As such, then, longitudinal instability can be taken as a measure of the extent to which individuals are politically aware and, consequently hold strong attitudes that are resistant to change (Bartle 2000, Iyengar 1973). The problem, of course, is in separating out response instability in observed items that is due to true attitude change from that which is merely random 'flipping'. Recent developments in confirmatory factor analysis and structural equation modeling have meant that this goal is now more easily attainable. These techniques and their application in assessing response instability as a measure of political sophistication are discussed in greater detail in chapter five.

2.7.4 Political Knowledge or 'Information Holding'

As we have seen in earlier sections in this chapter, most if not all theories of voting behaviour and models of democracy require at least basic levels of political knowledge amongst the citizenry. And, while various theorists have demonstrated that it may be possible in certain situations to make quasi-rational choices with minimal information, others maintain that "democracy functions best when its citizens are politically informed" (Delli Carpini and Keeter 1996, p. 1). Factual knowledge about government was the first aspect of political sophistication to be researched via the survey method (Hyman and Sheatsley 1947) and formed the original basis for the longstanding characterisation of the American public as uninformed about and uninterested in politics. It is probably the most fundamental aspect of political sophistication and would seem to ontologically precede all measures discussed so far. It is not possible for a belief system to obtain structure without the 'building blocks' of political information to work upon. The importance of political knowledge in determining the content and structure of political thinking has been shown by

its positive association with political tolerance; political participation; attitude holding, stability and constraint (Delli Carpini and Keeter 1996, Krosnick and Milburn 1990, Leighley 1991).

Standardly measured by administering a set of questions covering topics such as the relationship between governmental institutions, the names of office-holders or electoral candidates, the role and function of legislative bodies and the relative position of parties and candidates on policy dimensions, these question batteries provide an index of knowledge ranging from zero to a maximum correct score. Performance on these indices by the American public has been consistently poor since they were first introduced (Bennett 1988, Delli Carpini 1985, Delli Carpini and Keeter 1996). In a comprehensive study, Delli Carpini and Keeter have argued that political knowledge in the United States can be summarised in terms of three major dimensions – ‘who government is’; ‘what government is’ and ‘what government does’. The first of these involves being able to put names and faces to political actors, while the second speaks to constitutional knowledge and familiarity with the major institutions of the state. The ‘what government does’ dimension pertains to knowledge of the major political issues of the day and where the major parties stand on them relative to one another.

While people vary in their exact areas of specialisation (or perhaps more appropriately, ignorance) across dimensions, there is also a strong tendency for people to be generalists – if you score highly on one dimension you are likely to score quite highly on all three (Delli Carpini and Keeter 1996). Expectations that increased access to education and rising academic attainment since the War would lead to concomitant increases in civic competence (Converse 1972, Thompson 1970) have proved unfounded, with levels of factual knowledge about politics showing no discernible increase. Indeed, Bennett concludes from a recent knowledge survey of the American public that “using the standard academic grading system, the typical grade was a D+, hardly a sterling

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performance given the leniency with which some items were 'graded'" (1988, p. 481). Despite a relative paucity of similar studies in Britain, where such knowledge batteries have been administered, the general picture has shown the British to perform little better than their American counterparts (Baker, *et al.* 1996, Bartle 2000, Butler and Stokes 1969).

There are obvious problems in obtaining satisfactory measures of political knowledge via sample surveys. In an area that Albert Einstein once described as "more difficult than physics" (from Neuman 1986, p. 169), it is hard to see how short batteries of items in a survey interview can accurately and sensitively reflect the true heterogeneity of the political knowledge of the general public. Nonetheless, these indices are not really intended to present a full and accurate account of an individual's political knowledge but, rather, are intended to be population level 'diagnostic' indicators which tend to group people into quite broad bands of political awareness in more or less the correct order. They also seem to differentiate people in quite predictable and theoretically meaningful ways and are highly correlated with other indicators of cognitive ability, political interest and behaviour (Bartle 2000, Delli Carpini and Keeter 1996).

Apart from abstraction measures then, which have not really been collected on political attitude surveys in Great Britain, all three of these operationalisations of the political sophistication construct will be used at various points in this thesis. In particular, I shall be examining how information or knowledge is related to both the inter-connectedness and stability of political attitudes. Terminologically, although all of these concepts refer to slightly different aspects of the sophistication construct, I shall refer to the informational aspect more or less inter-changeably as 'awareness', 'information' and 'knowledge'. More detailed considerations of the methodological strengths and weaknesses of various operationalisations of the construct are provided in the empirical chapters in which they are used.

2.8 A Note on Defining 'Self-Interest'

A central line of argument presented throughout this thesis is that individuals are better able to determine their self-interest and derive attitudes consistent with its attainment, to the extent that they are better informed about politics. Determining what exactly is meant by 'self-interest', however, is far from straightforward. While, it would seem uncontroversial to assert the importance of information for good decision-making in areas where there are clear criteria for the evaluation of outcomes – financial investment or business management for instance – in politics, where no independent evaluative criteria exist, asserting that people's interests are not best served by their own actions and decisions raises the pejorative charge of assigning 'false-consciousness' to those who do not happen to share our opinions.

A means of moving beyond this subjective/objective dichotomy has been suggested by the concept of 'enlightened preferences' (Connolly 1983, Dahl 1989, Mansbridge 1983). This perspective leaves different individuals free to rationally evaluate diverging self-interests by defining them as "whatever that person would choose with fullest attainable understanding of the experiences resulting from that choice and its most relevant alternatives" (Dahl 1989, p. 180-181). Such a formulation highlights the importance of information for making decisions that maximise individual utility but avoids the problem of inevitable drift toward homogeneity of opinion with increasing information by allowing the determination of self-interest to be weighted by the idiosyncratic value configuration of the individuals and groups concerned (Bartels 1990). It is this 'enlightened preferences' formulation that I adopt in the discussions of the relationship between knowledge, attitude and political efficacy at various points throughout the following chapters.

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2.9 Conclusion

In chapters one and two I have described the theoretical background to concerns about the level of political sophistication of the mass public, reviewed perspectives which have sought to downplay the importance of an informed citizenry and provided a detailed review of developments in the nonattitude debate since Converse's original treatment. In the following chapters I adopt a range of different quantitative techniques and data sources to examine the relationship between political information and the content and structure of political attitude systems. This focus on the factors underlying political sophistication and its various manifestations will hopefully go some way toward addressing the fact that, after years of research into political belief systems and the sophistication of the mass public, we know far more about the distribution of political sophistication in the public than we do about its causes and consequences Luskin (1990).

3 POLITICAL AWARENESS AND BELIEF SYSTEM CONSTRAINT

In chapters one and two the concept of political sophistication and its importance in relation to theories of democracy and voting behaviour was introduced. It was argued that the existence of wide discrepancies in levels of political awareness amongst the mass public has serious negative implications for the ability of the polity to exercise power in the public interest – irrespective of one’s exact definition of democracy. Evidence relating low levels of political sophistication to more or less fixed characteristics of individuals suggests that sub-groups of the population may not only be socio-economically disadvantaged but may also be endowed with less political efficacy than others. The following chapters use a range of statistical techniques to address two related research questions: to what extent are discrepancies in political sophistication actually apparent within the British public; and what are the effects of increases in political information on the direction and internal coherence of political attitudes.

In this chapter Confirmatory Factor Analysis (CFA) and other techniques are used on data from two independent, nationally representative sample surveys to assess whether a significant cleavage exists in the British electorate in the extent to which people structure their PBSs in terms of coherent, overarching value dimensions. The focus of this chapter, then, is on the degree of consistency between individual elements of belief systems and how this consistency is stratified within the public as a whole. While consistency may be conceived of as residing *between* different elements at the same point in time or *within* the same element longitudinally, the focus in this chapter is solely on the former, cross-sectional type of consistency – which shall be defined here as

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constraint. Longitudinal consistency, and its relation to constraint is addressed in chapter five.

3.1 Cognitive Consistency and Political Belief Systems

The idea of cognitive consistency has long been of central importance in psychological thought. Heider's (1944, 1946) Balance theory proposed the idea that the need for cognitive consistency is a basic human motivational drive and paved the way for later dominant social psychological theories such as Cognitive Dissonance (Festinger 1957), Self-Perception Theory (Bem 1965, Bem 1972) and Associative Networks (Anderson 1983) all of which, implicitly at least, rest on the notion of consistency as a central tenet of human interaction and psychology. And despite the recent decline in the popularity of these approaches, the idea of cognitive consistency remains of strong underlying importance in much contemporary psychological theorising (Eagly and Chaiken 1993). That individual elements within broader cognitive structures, however defined, are in some way (and to varying degrees) 'consistent' with one another also has a strong intuitive rationale: we expect 'consistency' in the expressed views and actions of others and are keen to portray our own outlook as comprising a coherent and integrated whole (Aronson 1968, Tedeschi and Rosenfeld 1981).

In the area of PBS research, the issue of consistency has been no less influential and has focused on the extent to which the mass public, and different sub-groups thereof, organise their PBSs in terms of some higher order value system or political ideology. As outlined in chapters one and two, Philip Converse (1964, 1970, 1972, 1974, 1975, 1979a, 1979b, 1980, 1990) set the research agenda in this area with his seminal 'nonattitude' thesis. Observing low to zero-order correlations between different individual issue positions in the 1956-60 National Election Studies and comparing these associations with the

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consistently high ones found in a survey of political 'elites'²², Converse concluded that the "remarkably low levels of cohesion or internal integration among the mass public" was indicative of non-ideological belief system organisation. This claim of ideological innocence was further supported by the overwhelming unfamiliarity of the survey respondents with ideological concepts such as 'left-right' and 'liberal-conservative' – the bread and butter of elite political discourse. Converse found that less than fifteen percent of the US public used such ideological terminology when discussing politics and that two thirds of these seemed to show little understanding of the terminology when subsequently asked to explain their usage of it.

Indeed, not only were these measures indicative of non-ideological thinking among the majority of the electorate, they led Converse to further postulate that many individuals do not possess attitudes on these issues at all – responses are simply selected more or less at random in order to conform to the survey interview protocol. Such random responses, Converse argued, were responsible for the low levels of consistency that he and his colleagues observed between different issues at the same point in time and between the same issues over time. The inconsistency in responding was therefore seen as a function of two related factors, the fact that many responses to political attitude items were not based on any underlying cognitive entity and were therefore essentially random and, additionally, that where responses were underpinned by a 'true' attitude, these orientations were not seen as relating to any higher level organising principles or abstract value dimensions. Similar results have been reported from surveys of the British electorate (Butler and Stokes 1969, 1974). As was outlined in the previous chapters, Converse's pessimistic characterisation of the political innocence of the mass public has certainly not gone unchallenged and, in many respects, subsequent work in

²² The sample for the political elites survey was made up of candidates for the US House of Representatives.

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this area has been characterised primarily by attempts to either refute his initial thesis or to refute these later counter-claims (Sniderman and Tetlock 1986). Controversy has centred around such issues as how consistency should be measured, what constitutes a level of consistency acceptable as indicative of ideological organisation of PBSs and which are the demographic characteristics that are associated with belief system structure or lack thereof. In the following sections, I shall review the most important strands of the debate over the past thirty or so years before introducing the approach and methodology of the empirical analysis in this chapter in greater detail.

3.2 The Nature of Constraint

Political parties and movements may be thought of as being primarily defined by the amalgam of positions taken across the range of issues over which the polity exercises power. The way in which these individual positions are meshed together in relation to higher-order values or beliefs to form an integrated political outlook or agenda is what constitutes the ideology or belief system of a particular political orientation. At the level of the individual voter, the picture is essentially the same. In Converse's words, the discrete and seemingly unrelated issue positions that constitute psychological belief systems are bound together by

"some superordinate value or posture toward man and society, involving premises about the nature of social justice, social chance, "natural law" and the like. Thus a few crowning postures – like premises about survival of the fittest in the spirit of social Darwinism – serve as a sort of glue to bind together many more specific attitudes and beliefs, and these postures are of prime centrality in the belief system as a whole"

Converse (1964, p. 211)

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The nature or source of this constraint between individual issue positions is not strictly logical in nature but derives primarily from socio-historical, cultural and psychological influences (Heath 1986, Lipset, *et al.* 1954). Even the few instances of apparent logical correspondence between idea elements may be clouded by question content and format. For example, it may appear to the analyst that those respondents in favour of increasing public spending cannot *logically* also be in favour of reducing taxation. However, depending on how the question is asked, this may not necessarily be the case. For example, someone may be in favour of reducing certain types of tax and raising others, resulting in a net overall increase in taxation to fund higher public spending. The greater proportion of the 'glue' binding attitudes together, therefore, is social psychological in nature. Packages of beliefs are circulated in society through mass and interpersonal communications and picked up, to varying degrees, by different sections and social groups within the broader public. We seem to learn to understand 'what goes with what' more through attention to political dialogue and debate than we do through our own personal introspection.

Therefore, the idea that a particular belief 'goes with' another should not be seen as syllogistically proscriptive but as reflective of the historical and cultural influences brought to bear on the social and political fabric of a given society at a particular point in time – together with the 'idiosyncratic twist' engendered by the individual's own experiential history. The exact causal mechanisms underlying the internal consistency of PBSs, however, need not concern us overly here. Suffice to say that coherent, hierarchically structured political thinking entails some form of meaningful relation between individual issue positions. One might reasonably ask what benefit is to be derived from such internal and hierarchical consistency of PBSs. Surely it is possible to judge each issue on its own merits rather than having to assess how it fits into some grand scheme of things? This, however, is to misunderstand the nature of the constraint construct. For internal consistency of attitude systems does not, as is

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often assumed, equate to ideological dogmatism in the Maoist or Marxist sense. It requires that meaningful relationships should exist between individual issue positions but does not specify what the nature of this relationship should be.

Possession of coherent and structured belief systems then is important at the individual level as it allows the easy assimilation and retention of novel information and provides a meaningful framework through which it is possible to assess the optimal course(s) of action to be taken to achieve one's political objectives. At the social-structural level, communication between political actors and opinion leaders and the public is greatly facilitated to the extent that they all conceptualise political issues and debate within a common framework (Kinder and Sears 1985). As Peffley and Hurwitz put it:

"The importance of this topic (PBSs) is certainly warranted, for it has profound implications both at the macro level, where it speaks to the positive and normative dimensions of democratic theory, and to the micro level, where it addresses questions of mass sophistication and the extent to which individuals can make rational and consistent choices".

Peffley and Hurwitz (1985, p. 871)

Thus, when Converse announced that the American public was largely innocent of ideology, the implications were both profound and controversial. Was it really possible to draw such drastic conclusions through the number crunching of survey data? Some of the strongest criticism of Converse's position has been in terms of the methodology he employed – including those who accept his empirical approach but reject his conclusions on technical methodological grounds, as well as those who argue that aggregated survey data are simply incapable of yielding insights into the belief systems of individuals. These perspectives were reviewed in chapters one and two. Here,

the discussion turns to the more technical and methodological issues of how the constraint aspect of sophistication might actually be measured.

3.3 Measuring Attitude Constraint

The apparently technical matter of how constraint should be operationalised has received a good deal of consideration in the PBS research literature. Much criticism has been levelled at the use of inappropriate correlational statistics. The frequently used Goodman and Kruskal's gamma, for example, have been shown to provide consistently inflated estimates – often approaching unity for far from consistent associations (Balch 1979). Furthermore, because correlational statistics conflate slope and the distribution of points about the regression line, they can be affected by the distributional properties of the variables being correlated to such an extent that between-group differences are often attributable to differences in item variance rather than the actual level of association between the two variables (Achen 1982, King 1986, Weissberg 1976).

The frequently used approach of comparing averaged correlation coefficients across a matrix of variables suffers from at least two major problems. First, as this technique involves either pair-wise or listwise deletion of missing cases, with levels of missing data on these types of attitudinal variables often ranging between 10-30%, the effects of non-random item missing data can lead to substantial over-estimates of constraint²³ (Bennett, *et al.* 1979, Luskin 1987). Second, the lack of parametric statistical tests for differences in these averaged coefficients means that comparing levels of constraint between groups, while of some descriptive value, is usually done by 'eyeball' methods with no idea as

²³ The direction of the bias is toward overestimates as it is the least politically involved and therefore the least ideologically constrained sample members who are most likely to provide item missing data.

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to what constitutes a sizeable, a small, or even a significant difference between groups.

Multivariate correlational methods such as Exploratory Factor Analysis (EFA) have also been used to examine the relatedness of individual issues and dimensionality of belief systems within the general public (Himmelweit, *et al.* 1985, Jackson and Marcus 1975, Stimson 1975). These exploratory approaches have been argued to allow the factorial structure underlying positions on these issues to emerge rather than being specified by the researcher (Luttbeg 1968). In terms of political sophistication, the rationale underlying these factor analytic approaches is that, to the extent that belief systems are more constrained, the factorial structure should be simpler and the percentage of variance explained greater the more sophisticated the individual's political thinking (Stimson 1975). For example, people who have highly constrained belief systems with issue positions structured by a higher order value dimension(s), should show a simpler factor structure while those who do not order their issue positions in terms of such higher order values should exhibit a more fractured, multi-factor solution. While this general hypothesis has been largely confirmed, there is a lack of consensus as to whether more constrained belief systems should always result in simpler factorial structure (see Luskin 1987). Furthermore, solutions for exploratory factor analyses are heavily determined by issue content and the number of variables included in the analysis, which makes it difficult to argue that such atheoretical approaches reflect the true ideological structuring of belief systems in the mass public (Rosenberg 1988).

Because of such problems, a number of more recent treatments of constraint have moved away from bivariate correlational measures and EFA and have adopted the method of Confirmatory Factor Analysis (CFA) or its extension - Structural Equation Modeling (SEM) (Joreskog 1973, Joreskog 1993, Joreskog and Sorbom 1989). CFA involves the analyst specifying a measurement model

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with imperfectly observed indicator variables measuring latent factors or constructs. The pattern of relationships between latent variables and observed variables is specified *a priori* and if the measurement model is seen to hold, it can be extended to include regression and covariance paths between latent constructs²⁴. Through various estimation procedures (most commonly Maximum Likelihood), SEM provides estimates of the standardised and unstandardised factor loadings between the latent variables and each of their indicators, in addition to estimates of the error of measurement in each of the observed variables and regression paths between latent constructs.

Judd and Milburn (1980, see also Judd, *et al.* 1981) have argued that, in conjunction with measures of overall model fit, the pattern of unstandardised factor loadings between each indicator variable and the latent construct it measures may be taken as indicative of the level of belief system constraint in a population. Using the unstandardised coefficients, they argue, avoids the potential problem of unequal variances in the observed variables across groups causing spurious differences in constraint in standardised measures. By stratifying the NES 1972-76 sample into groups differing in the extent to which they utilised ideological terminology when discussing politics (Level of Conceptualisation), they showed that, while the *pattern* of unstandardised factor loadings did differ significantly between groups, there was no consistent trend in terms of one group having larger or smaller coefficients than the other. This led them to conclude that neither group exhibited greater attitudinal constraint than the other.

However, as both Martin (1981) and Converse himself (1980) have argued, the unstandardised factor loadings between indicator variables and the latent construct they measure are not particularly useful measures of constraint. This

²⁴ Although note that this separation of the measurement and the structural parts of the model has been and remains of some controversy (see Fornell and Yi, 1992).

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is because they do not represent absolute magnitudes but are meaningful only *relative* to the factor loading that is fixed to unity in order to set the scale of the latent variable²⁵. They argue that differences across groups in standardised parameters and measurement errors of the observed variables are more informative indicators of the internal coherence of political belief systems. In this chapter I also use CFA and SEM to investigate differing patterns of belief system organisation across political awareness groups but consider a number of different model parameters, in addition to the unstandardised factor loadings examined by Judd and Milburn. The pros and cons of these model parameters as measures of belief system structure are addressed at various points throughout this and the following chapters. By presenting a number of different indicators of constraint, recognising the pros and cons of each and observing how they vary across groups differing in political awareness and engagement, I hope to evaluate the idea that a significant minority of the public are characterised by weak attitudes and unconstrained belief systems by presenting a pattern of results to be judged in their entirety rather than standing or falling on the interpretation of a particular statistic or model coefficient.

3.4 The Data

The data sources for this study are wave 1 (1991)²⁶ of the British Household Panel Study (BHPS) and the 1997 British General Election Study (BGES). The BHPS began in 1991 and is conducted by the ESRC Centre for Micro-social Change at the University of Essex, Colchester. The survey used a multistage stratified cluster design covering all of Great Britain. The survey instrument

²⁵ see later discussion of CFA and SEM in section 3.5.1 for a more detailed consideration of this point.

²⁶ Wave 1 was used rather than a wave closer to the BGES 1997 as the response rate and representativeness of the sample was greatest at this wave due to sample attrition over subsequent waves.

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comprised a short household level questionnaire followed by a 45 minute face-to-face interview and a short self-completion schedule for every adult aged 16+ in the household (see BHPS Technical Report 1992). This chapter focuses on Wave 1 of the BHPS which achieved a household response rate of 65%²⁷. The 1997 BGES is the latest in a series of election studies initiated by Butler and Stokes in 1963. It was conducted by the National Centre for Social Research²⁸ and uses a multistage stratified cluster design covering all of Great Britain. The survey comprises a face-to-face interview followed by a short self-completion questionnaire with one randomly selected adult aged 18+ in each selected household (see Thomson, *et al.* 1999, for Technical Report).

Both studies contained the six items of the Heath et al 'left-right' value scale referred to in section 2.6. The six items are all asked in an 'agree-disagree' format with five response categories and a 'don't know' option. The subject matter of the items covers collectivism v individualism; government intervention v free enterprise; and economic and political equality. To control for response sets some of the items were reverse coded in the questionnaire. For the analysis, then, all items were recoded so that 'strongly agree' (5) always indicated a right wing response and 'strongly disagree' (1) a left wing response. The exact wordings of the six items are provided in full below.

Question Wordings for Heath et al. (1993) 'Left-Right' Value Scale

1. Ordinary people get their fair share of the nation's wealth.
2. There is one law for the rich and one for the poor.
3. Private enterprise is the best way to solve Britain's economic problems.

²⁷ This response rate refers to proportion of issued addresses at which the household interview was completed. Calculation of an individual response rate is problematic as it involves making an estimate of the number of individuals sampled and within scope.

²⁸ Formerly Social and Community Planning Research (SCPR).

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4. Major public services and industries ought to be in state ownership.
5. It is government's responsibility to provide a job for everyone who wants one.
6. There is no need for strong trade unions to protect employee's working conditions and wages.

3.5 Method

As the primary aim of this chapter is to explore how belief system structure and organisation varies across groups with different levels of political awareness and engagement, the first step in the analysis was to divide the sample into groups which vary on these dimensions. Once the comparison groups had been defined, the next stage was to evaluate whether a single factor solution was a valid representation of the dimensional structure underlying the six items of the 'left-right' scale and, specifically, whether this structure would hold, not just for the whole sample, but across the two political awareness groups. The technique used to make this evaluation was CFA with Full Information Maximum Likelihood Estimation (FIML²⁹). The software application used was Amos 4.0 (Arbuckle and Wothke 1999). In the following section I provide a brief outline of and introduction to CFA and SEM to inform the later presentation and discussion of results. A detailed discussion is beyond the scope of this thesis but see Bollen (1989) or Kline (1998) for excellent in-depth treatments.

3.5.1 *Confirmatory Factor Analysis and Structural Equation Modeling*

Structural equation modeling (SEM) grows out of and works in ways similar to multiple regression, but it additionally takes into account the modeling of interactions, correlated independent variables, measurement error, correlated

²⁹ FIML is ML with an item missing data imputation routine. See Wothke (1998)

error terms, multiple latent independent variables, each measured by multiple indicators and one or more latent dependent variables (also each with multiple indicators). SEM may be used as a more powerful alternative to multiple regression, path analysis, factor analysis and analysis of covariance. That is, SEM can be seen as an extension of the General Linear Model (GLM) of which multiple regression is a part. While in multiple regression and ANOVA, modeling is based on minimising the difference between observed and predicted values at the individual (or case) level, SEM involves the analysis of covariance structures (the pattern of covariation between all observed variables in the model) and model fitting is based on minimising the discrepancy between the sample covariances and the covariances predicted by the model.

Most SEM software applications provide a large number of model parameter estimates, the primary ones of interest being the factor loadings between latent variables and their observed indicators, regression paths between latent variables (standardised and unstandardised), disturbance and residual error terms as well as means, intercepts and variances for both observed and latent variables. An error term refers to the measurement error of a given indicator (which can either be estimated by the model or specified by the researcher) while disturbance terms denote the unexplained variance in the latent endogenous variable(s) due to all unmeasured causes. The very complex set of simultaneous equations and matrix algebra which underlie a structural equation model can be represented in the form of a path diagram. Figure 3.1 defines the standard symbol notation for SEM.

SEM is often conceptualised as a two step process: one first validates the measurement model and then fits the structural model. The former is accomplished primarily through confirmatory factor analysis, while the latter is achieved through regression analysis with latent variables. One starts by specifying a model on the basis of theory. Each variable in the model is

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conceptualised as a latent one, measured (where possible) by multiple indicators. They are categorised as either 'exogenous' or 'endogenous', the former being variables that are independents with no prior causal variable while the latter are both *mediating* variables - variables which are both effects of other exogenous or mediating variables, and are causes of other mediating and dependent variables - and *pure dependent* variables.

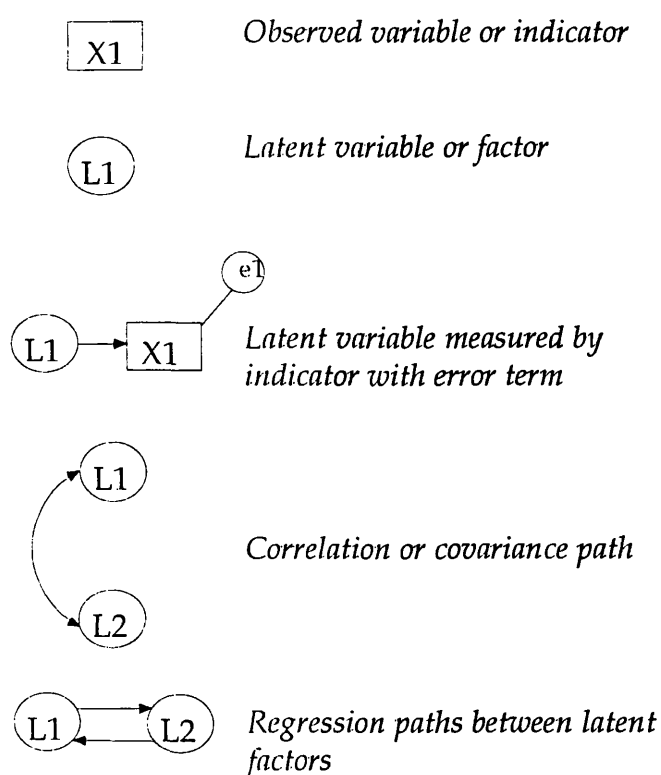


Figure 3.1 Primary Symbols used in Path Analysis³⁰

In SEM, each unobserved latent variable must be explicitly assigned a metric, or measurement range. This is normally done by constraining one of the paths from the latent variable to one of its indicator variables to the value '1'. This is

³⁰ From Bollen, 1989; p. 33

necessary as, otherwise, the scale of the latent variable would be unknown and the model would be unidentified³¹. Given this constraint, the remaining paths can then be estimated. The indicator selected to be constrained to 1 is termed the reference item. Which indicator is selected as the reference item is an essentially arbitrary choice although it is common practice to select that indicator which has the highest standardised factor loading on the latent variable. This generally results in all the other unstandardised loadings being below unity. As an alternative to using a reference item to set the scale of the latent variable, one can specify a value for its variance and let all the factor loadings be estimated, although this is not recommended as there is no *a priori* means of establishing what this value might be (Bollen 1989). Not specifying a reference item results in only a standardised solution to the model being estimated.

Common or principal components factor analysis is used to establish whether the indicators adequately measure their corresponding latent variables. The researcher proceeds to structural modeling when the measurement model has been validated, i.e. when the observed variables have been shown to act as adequate measures of the latent constructs. Validity of the measurement model is assessed on the basis of overall model fit, direction and magnitude of factor loadings and the proportion of variance accounted for in the observed variables by the latent construct. Depending of the distributional properties of the observed variables, model estimation can be done using a number of different estimation procedures, although Maximum Likelihood Estimation (ML) is by far the most common. ML produces estimates based on an iterative routine which maximises the probability that the observed covariances are

³¹ Identification, in non-technical terms, means that there must be enough known parameters in the model for the unknown parameters to be estimated (see Kline, 1998, chapters five and six).

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drawn from a population assumed to be the same as that reflected in the covariance matrix implied by the model.

The difference between these two matrices (estimated and observed) is distributed as Chi Square and, to the extent that the two are different, Chi Square is larger relative to its degrees of freedom. This means that non-significant Chi Squares ($p > 0.05$) are indicative of model fit because the predicted and the observed covariance matrices are not significantly different. This has two major benefits; first, it is possible to obtain an overall or 'global' assessment of the adequacy of a model and second one may test for differences in fit between models that are 'nested' within one another. Thus, for example, we may want to test whether all the factor loadings from a latent variable to its various indicators are the same or different. This can be done by estimating the fit of the model in which the factor loadings for a particular construct are fixed or constrained to equality and then estimating the fit of the model in which the same factor loadings are left free to vary. As the difference between the Chi Square values of the two nested models is itself distributed as Chi Square, comparing this Chi Square difference to the change in degrees of freedom between the two models allows us to test whether the constraint of equal factor loadings has significantly reduced the fit of the model (p values of > 0.05 standardly taken to indicate that the two models are not significantly different).

This logic applies equally to testing for differences in model parameters between groups – we can constrain any parameters in a given model to be the same across any specified sub-groups and test whether such constraints lead to a significant reduction in model fit. Due to the fact that Chi Square is extremely sensitive to sample size, a number of modified Goodness of Fit indices have been developed which attempt to incorporate factors such as sample size relative to degrees of freedom and model parsimony (i.e. models with fewer parameters to be estimated are, all things equal, preferable) in their assessment of model fit. These indices are used in conjunction with the

standard Chi Square relative to degrees of freedom statistic to establish the 'global' fit of models. The fit indices to be used at various points in this thesis are:

- Comparative Fit Index (CFI) (Bentler 1990) This has a range of 0-1; with 1 indicating perfect fit. Values greater than .90 have traditionally been taken to indicate acceptable model fit, although more recently a cut-off of .95 has been suggested as more appropriate (Carlson and Mulaik 1993). CFI compares the existing model fit with a null model which assumes the latent variables in the model are uncorrelated (the "independence model"). That is, it compares the covariance matrix predicted by the model to the observed covariance matrix, and compares the null model (covariance matrix of 0's) with the observed covariance matrix, to gauge the percent lack of fit which is accounted for by going from the null model to the specified model.
- Expected Cross Validation Index (ECVI) (Cudeck and Browne 1983) - estimates the average discrepancy function value you would get in a second random sample from the population where you would use the estimated and fixed parameters from an initial, calibration sample as fixed parameters in computing the discrepancy between the reproduced variance-covariance matrix and the second sample's sample variance-covariance matrix. It can be thought of as providing an estimate of the extent to which a specified model can be expected to replicate on independent samples. Smaller values indicate more reliable models and can be used to evaluate the relative fit of nested models.
- Root Mean Square Error of Approximation (RMSEA) is an index of approximate rather than exact model fit that takes into account model parsimony (fewer parameters being estimated) – scores below 0.08 indicating acceptable model fit, scores of around 0.05 or below indicating very good fit (Browne and Cudek 1993). RMSEA is less affected by differences in sample size than many other measures of global fit.

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The aim of this and the following chapter is to use CFA and SEM to evaluate the idea that a superordinate 'left-right' value dimension underlies many of the political judgements of the British public. The analysis will proceed from an assessment of the validity of this claim in relation to the public as a whole to examine whether evidence to support the existence of such belief system structure can also be found amongst the least politically aware and involved members of society.

3.5.2 Stratifying the Sample

In order to get an indicative idea of how constraint varies across social groups by more traditional measures before moving on to the CFA, both the BHPS and the BGES samples were first stratified by a range of variables which have been found in previous research to discriminate between groups high and low in attitude constraint. Cronbach's Alpha was computed and a Principal Components Analysis (PCA) with varimax rotation was performed on the six items of the 'left-right' scale for each stratum. Cronbach's Alpha returns a value more or less equivalent to the average Pearson coefficient across items³², while the number of factors and the percentage of variance accounted for by the first principal components have been taken as indicative of the overall strength of association between the individual items – with more dimensions and less variance accounted for taken as indicating lower levels of association or constraint (Stimson, 1975). As can be seen from Table 3.1, both measures show a near identical pattern of results with, as expected, higher coefficients, fewer principal components and more variance explained in the expected groups (greater cognitive ability; more politically involved; and higher socio-economic status) in both surveys.

³² Cronbach's Alpha is also affected by the number of items included in the analysis but as the same six items were included across strata the coefficient may be interpreted as equivalent to the mean Pearson coefficient.

Political Awareness and Belief System Constraint

The variables which showed the greatest discrimination in levels of association between items were those measuring political interest, involvement and partisanship while the education and socio-economic variables did not discriminate as strongly.

<i>Variable</i> ³³	<i>BHPS 1991 (n = 9912)</i>			<i>BGES 1997 (3093)</i>		
	Alpha	PCs ³⁴	n	Alpha	PCs	n
<i>Education</i>						
Degree or above	.76	1 (46%)	694	.75	1 (46%)	339
No qualifications	.67	1 (38%)	3619	.58	2 (33:17%)	931
<i>Political Interest</i>						
Very interested in politics	.82	1 (52%)	964	.77	1 (47%)	294
Not at all interested in politics	.53	2 (30:18%)	1421	.36	2 (25:21%)	160
<i>Party membership</i>						
Member of political party	.87	1 (61%)	293	na		
Not member of political party	.67	1 (38%)	8653	na		
<i>Social group membership</i>						
Member of one or more	.70	1 (40%)	4256	na		
Member of no organisations	.67	1 (37%)	4687	na		
<i>Political knowledge</i>						
Political knowledge score 6-10	na			.73	1 (43%)	1483
Political knowledge score 0-5	na			.58	2 (33:17%)	1492
<i>Social class</i>						
Professional occupation	.72	1 (41%)	308	.71	2 (41: 17%) ³⁵	132
Unskilled occupation	.59	2 (33:18%)	242	.56	2 (32: 17%)	176
<i>Partisanship</i>						
Supporter of political party	.78	1 (48%)	3884	.68	1 (39%)	2611
Not supporter of any party	.47	2 (28:20%)	2628	.49	2 (29:20%)	186
<i>Tenure</i>						
Owens	.70	1 (39%)				
Rents	.60	2 (34:17%)				
<i>Political activity</i>						
Active in political party	.88	1 (63%)	134	na		
Not active in political party	.68	1 (38%)	8810	na		

Table 3.1 Alpha Coefficients and Principal Components

This preliminary analysis serves two useful purposes – to show the robustness of differences between these groups on less technically sophisticated but more

³³ The more politically engaged group are always presented first.

³⁴ Where there is more than one PC, % of variance is presented for each component in magnitude order.

³⁵ Eigenvalue of second factor = 1.004.

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traditional measures of constraint - and to inform the derivation of awareness groups for the later analyses. Comparison groups for the CFA were therefore formed according to the following criteria: for the BHPS the politically 'aware' group comprised those respondents who reported being both 'very interested' in politics and supporting a named political party (n=698), while the 'unaware' group comprised those who were 'not at all interested' in politics, did not support a named party and had no educational qualifications (n= 625). For the BGES the corresponding groups were made up of those respondents who were 'very interested' in politics and who supported a named political party (n= 280) and those who were either 'not very' or 'not at all interested' in politics, who did not support a political party and who had no educational qualifications (n= 195).

Although using this preliminary analysis as the basis for group formation criteria may seem to be 'cooking the books' in favour of confirming the working hypothesis in the later analyses, the approach, I believe, is justified in two respects. First, the aim here is not to derive precise population estimates of the proportions falling within each of the groups but merely to evaluate the hypothesis that there is a wide discrepancy between the most and the least politically aware and engaged members of society in the extent to which they make use of higher level value dimensions to order individual issue positions. Second, because the analysis is based on data from two independent surveys, the robustness of any differences between groups must be sufficient to replicate between samples - thereby minimising the likelihood of capitalising on chance in any one sample. Ideally, the groups would have been formed on the basis of scores on a political knowledge quiz in conjunction, perhaps, with some measure of interest or involvement in politics. However, as there is no political knowledge quiz included on the BHPS, it was not possible to include a direct measure of this construct in the group formation criteria while retaining the cross-sample replication. However, for the BGES, on which a six point knowledge quiz was included, the mean score on the quiz was 5.3 in the

politically aware group and 3.1 in the unaware group ($p < 0.001$). We can therefore be confident that these groups do reflect wide differences in levels of political knowledge and engagement.

3.6 Results

3.6.1 Measurement Model for the BHPS

Figure 3.2 shows the path diagram and fit statistics for the measurement model fit to the whole sample of the 1991 BHPS ($n=9912$). The six observed variables³⁶ (rectangles) measure one latent variable (ellipse) representing the 'left-right' value dimension.

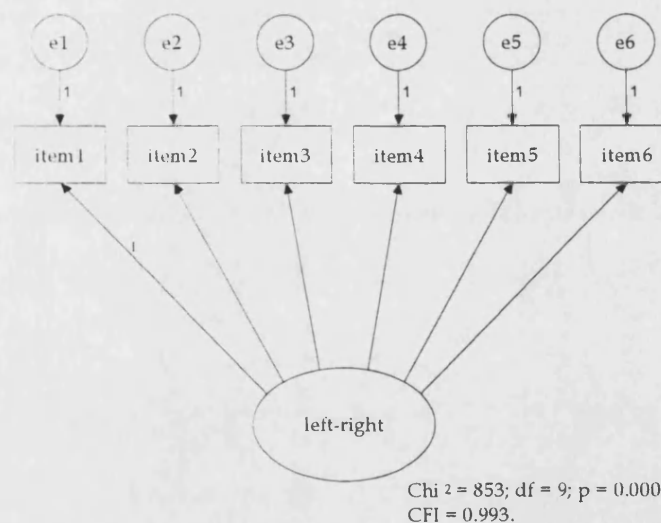


Figure 3.2 – Measurement model BHPS whole sample

Note that the factor loading from the latent factor to item 1 is fixed to 1. This is done in order to set the scale of the latent variable to be the same as this item

³⁶ The question wording for each item is provided on page 80.

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(see section 3.5.1). The key implication of setting the scale of the latent variable in this manner is that the unstandardised factor loadings must now be interpreted as *ratios* of the loading that is fixed to 1. Thus, an unstandardised factor loading of 0.8 indicates that the loading between that item and the common factor is eight tenths the magnitude of the loading of the item whose value has been fixed to 1.

The χ^2 value of 853 on 9 degrees of freedom is highly significant ($p = 0.000$), indicating that the exact fit between the predicted and the observed covariance matrices is not close. However, with a sample size of nearly 10 000, even a very well-specified model would be expected to exhibit such a discrepancy in exact fit. The mis-specification results from the fact that no covariance paths are fitted between the error terms of the indicators. Given the similarity of the content of some of the items and the fact that they all used an identical question format, the idea that the covariances between error terms are exactly zero in the population is highly implausible. Using modification indices³⁷ to add covariance paths massively reduces the χ^2 value to provide significantly better model fit. However, because such an approach is not theory driven but rather capitalises on chance sampling variation, it is better to stick with the theory driven model and look at additional measures of fit that make some adjustment for sample size and model parsimony. The CFI value of 0.993 indicates that the single common factor model fits the data rather well for the whole sample on these less restrictive criteria. Additionally, including the covariance paths suggested by the modification indices has little impact on the magnitude of the factor loadings or on other model parameters, suggesting that their exclusion from the model is substantively unimportant.

³⁷ Modification indices uses analysis of residuals to suggest the incorporation of additional paths to improve the fit of the model.

Political Awareness and Belief System Constraint

Factor loadings, R^2 values and error terms for the one factor model are presented in Table 3.2. All loadings are highly significant, in the expected directions and close to 1. As these unstandardised loadings are ratios of the loading whose value is fixed to 1, this indicates that all item loadings are of more or less equal magnitude in the population as a whole³⁸. R^2 values show that the latent construct accounts for between about 20% and 30% of the variance in each of the indicators. Taking these three measures in conjunction, the one factor model can be seen to provide a reasonable account of the observed data for the whole sample BHPS data³⁹.

Variable	Loading	S.E.	C.R.	P	R^2	Error
Fair share	1				0.27	0.84
One law for rich	1.10	0.03	33.7	0.000	0.32	0.81
Private enterprise	1.00	0.03	32.4	0.000	0.28	0.81
Public services	0.89	0.03	29.7	0.000	0.21	0.97
Government responsibility	1.07	0.03	32.2	0.000	0.26	1.00
Strong unions	1.05	0.03	31.9	0.000	0.26	1.00

Table 3.2 Factor loadings and R^2 - BHPS whole sample

Having established that the one factor model provides a reasonable fit for the whole sample, the next step was to determine how the one factor model would perform across both political awareness groups described in section 3.6. Table 3.3 shows parameter estimates for the one factor model for the aware and unaware respondents. All the factor loadings in both groups are in the hypothesised direction (positive) and statistically significant at the $p < 0.001$ level. However, while the coefficients are all statistically significant, two major differences in the parameters of the model across groups stand out: the

³⁸ Indeed, constraining all the factor loadings to 1 actually increases overall model fit on some indices.

³⁹ Although it should be noted that the item R^2 are in the lower bound of standard reliability criteria (Stevens 1995).

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standard errors are consistently smaller (also reflected in the columns showing the critical ratios (C.R. = the ratio of coefficient to standard error)) and the R^2 values are considerably larger in the politically aware group across all six items. Furthermore, while neither so clear cut nor consistent, the error terms of the indicators do appear, on average, to be slightly higher in the unaware group.

Variable	aware (n = 698)						unaware (n = 625)					
	Load	S.E.	C.R.	P	R^2	error	Load	S.E.	C.R.	P	R^2	error
Fair share	1				0.48	0.68	1				0.09	1.10
One law	1.10	0.07	15.9	0.000	0.48	0.83	1.02	0.25	4.00	0.000	0.14	0.73
Priv ent	1.25	0.07	17.4	0.000	0.60	0.66	1.11	0.29	3.86	0.000	0.14	0.90
Pub service	1.17	0.07	16.0	0.000	0.43	0.94	1.33	0.33	4.05	0.000	0.08	1.00
Govmnt.	1.05	0.07	15.2	0.000	0.43	0.91	1.56	0.37	4.25	0.000	0.26	0.79
unions	1.06	0.07	15.1	0.000	0.49	0.91	0.88	0.25	3.46	0.001	0.16	1.08

Table 3.3 Factor Loadings and R^2 - BHPS Awareness Groups Comparison

The standard error of an estimate is a measure of uncertainty and indicates the reliability of the estimate under repeated sampling from the same population. The size of standard errors is determined primarily by sample size and the variance of the estimator but can also be strongly influenced by measurement error. As discussed in section 2.3, there are many sources of measurement error in survey estimates, the main ones being (i) effects of interviewers on respondents (ii) weaknesses in the wording of survey questions (iii) mode of data collection and (iv) respondents' inability or unwillingness to provide accurate answers (Groves 1989). As the first three of these should be randomly distributed across the sample, the respondent's inability or unwillingness to provide reliable responses is the most plausible cause of this clear and consistent difference.

R^2 can be thought of as indicative of the proportion of variance that one or several variables can account for in another variable. In CFA it is often taken as

indicative of the validity of individual items as measures of a latent construct. Valid items should – all things equal – have more of their variance accounted for by the latent factor than less valid items. As the R^2 values are three to four times higher in all but one variable (which itself is double the magnitude) in the politically aware group, it would seem that the strength of the relationships between the left-right latent factor and each of the observed variables – or the reliability of the indicators – is considerably greater amongst the politically aware respondents. A problem with this interpretation of R^2 is that differences across groups can be caused as much by differences in the variance of the independent and dependent variables as by the actual level of association (Achen 1982, King 1986).

Examination of the item variances across groups indicates that the variances of the indicators are, on the whole, lower in the unaware group. However, no clear pattern emerges in terms of the relationship between item variance and magnitude of R^2 . For example, there is no difference in the variance of the 'Fair Share of the Nation's wealth' item across groups⁴⁰ yet the difference in R^2 between groups on this question is the greatest of all six items⁴¹. Furthermore, while the lower variance of the independent variables in the unaware group means they have less explanatory power with which to 'explain' the variance of the latent variable (hence, the argument goes, the lower R^2), the variance of the latent variable is also considerably lower in this group (0.12 compared to 0.64), meaning that the independent variables in this group have less variance to 'explain' relative to the politically aware group. Thus, while these R^2 values should be interpreted with caution, the potential confounding effect of differential item variances should not necessarily lead us to reject a causal interpretation based on differences in political awareness across groups. A

⁴⁰ As measured by the Levene test for Homogeneity of variance.

⁴¹ This analysis was repeated on the BGES 1992 and the same pattern was found; larger R^2 s in the politically engaged group even on items with no difference in item variance.

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third difference between groups is in the disturbance or error terms of the indicators – the aware group having on average slightly lower values. Given the more or less arbitrary metric of the indicators and the difference in the variances of the latent variables across groups, however, the absolute magnitudes of the error terms are rather meaningless and it is better to refer to the overall proportion of item variance that is constituted by error - which is simply one minus the R^2 value.

As was mentioned earlier, a major benefit of SEM is that it permits statistical tests for differences in parameters across groups where other measures, such as average correlation and EFA do not. As discussed in section 3.5.1, the method of testing for differences in parameter estimates across groups is based on the difference in Chi Square between nested models. Table 3.5 shows the Chi Square and CFI values and the change in each for a series of nested models, starting with model I, in which all parameters are unconstrained across the two groups, through to model V where the factor loadings, error terms and latent variances are constrained to be the same in each group.

Model	Chi 2	df	CChi 2	Cdf	sig.	CFI
I	121.7	18	-	-	-	0.993
II	129.4	23	7.8	5	0.170	0.993
III	163.8	24	42.1	6	0.000	0.991
IV	173.1	29	51.4	11	0.000	0.990
V	347.3	30	225.6	12	0.000	0.979

I No constraints

II Factor Loadings equal

III Error variances equal

IV Loadings and Error variances equal

IV Loadings, error and latent variance

Table 3.5 Nested measurement models BHPS wave 1

The change in Chi square relative to the increase in degrees of freedom is not significant between the baseline model and model II which imposes the constraint of equal factor loadings across groups ($p = 0.17$). This 'factorial' or

'metric' invariance implies that the same latent construct is being measured in each group; had the pattern of factor loadings been different, it would have been difficult to be confident that the same 'qualitative' meaning could be attributed to the common factor across groups (McArdle and Nesselroade 1994). Imposing further between group constraints, however, could not be supported as is indicated by the significant χ^2 value ($p < 0.001$) and the reduction in CFI for every other model in Table 3.5. The fit of the models becomes progressively worse as more between-group equality constraints are imposed, with the poorest fitting model of the five being the last one (model V) in which the variances of the latent variables, in addition to the factor loadings and error variances are constrained to be equal in both groups. The results of the first stage of analysis, then, show that the 'left-right' value dimension – as represented by the latent factor – appears to underlie responses to the six observed items for the whole sample of the BHPS. This factor structure is also evident in both political awareness groups – as indicated by the between-group invariance in the factor loadings. However, the reliability and strength of this constraining effect is considerably greater amongst the politically aware respondents, as reflected in the substantial differences in standard errors and item R^2 s between the two groups.

3.6.2 Measurement Model for the BGES

The analyses described in section 3.7.1 were replicated on the BGES sample in order to evaluate the robustness of the results. Table 3.6 (which also includes the BHPS estimates for comparative purposes) shows that, as for the BHPS sample, the one factor model fitted the data for the whole sample quite well given the sample size ($\chi^2 = 184$; $df = 9$; $p < 0.001$; CFI=0.996) with all parameters highly significant ($p < 0.001$) and in the expected direction. In contrast to the BHPS data, in which all factor loadings were close to 1, the factor loadings in table 3.6 are all less than one. This indicates that the factor loading for the item used to set the scale of the latent variable is larger than the

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other five and makes a significantly greater contribution to the variance of the latent variable. The R^2 values and measurement errors of the indicators are of a similar magnitude to those observed on the BHPS sample. Having established that the one factor model also provides a good fit for the whole sample in the BGES, the next stage was again to compare the fit of the model across the two political awareness groups.

Variable	BHPS (n=9912)						BGES 97 (n=3093)					
	Load	S.E.	C.R.	P	R ²	error	Load	S.E.	C.R.	P	R ²	error
Fair share	1				0.27	0.84	1				0.40	0.55
One law	1.10	0.03	33.7	0.000	0.32	0.81	0.90	0.04	20.4	0.000	0.29	0.72
Priv. Ent.	1.00	0.03	32.4	0.000	0.28	0.81	0.91	0.04	20.8	0.000	0.31	0.66
Pub. services	0.89	0.03	29.7	0.000	0.21	0.97	0.75	0.04	17.3	0.000	0.18	0.93
Government	1.07	0.03	32.2	0.000	0.26	1.00	0.70	0.04	16.5	0.000	0.16	0.93
Strong unions	1.05	0.03	31.9	0.000	0.26	1.00	0.85	0.05	18.9	0.000	0.23	0.86

Table 3.6 Parameter estimates for whole BHPS and whole BGES sample

Table 3.7 shows the same fit indices as in Table 3.3 for a series of nested models to test for invariance in parameters across groups in the BGES. The change in χ^2 is significant for every row in the table, indicating that none of the parameters are invariant across groups⁴². In contrast to the results of the between group comparison in the BHPS sample, the factor loadings were not invariant between groups in the BGES as indicated by the significant change in Chi Square between Models I and II. This implies that the nature of the construct being measured is qualitatively different in each group⁴³.

⁴² With these sample sizes the unadjusted Chi Square is an adequate measure of fit by itself, although the adjusted measures also support this conclusion.

⁴³ A less strict measure of factorial invariance which requires only that the pattern, rather than the actual values of the loadings be the same, also fails to support the idea that the construct is the same across groups.

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Model	Chi ²	df	CChi ²	Cdf	sig.	CFI
I	53.1	18	-	-		0.995
II	70.7	23	17.6	5	.002	0.994
III	77.4	24	24.3	6	.003	0.993
IV	84.4	29	31.3	11	.004	0.993
V	139.2	30	86.1	12	.012	0.987

- I No constraints
- II Factor Loadings equal
- III Error variances equal
- IV Loadings and Error variances equal
- V Loadings, error and latent variance

Table 3.7 Nested measurement models BGES 97

The model of best fit then, for which parameter estimates are presented in Table 3.8, is Model I which imposes no between-group constraints. The pattern of the parameter estimates across groups is, again, very similar to those found for the BHPS: the global fit of the model (Model I) is very good (CFI=0.995) but, while for the politically aware group the coefficients are all positive and highly significant, for the unaware group, although the coefficients are in the expected direction, the standard errors are all uniformly low, one of the factor loadings fails even to reach statistical significance at the $p = 0.05$ level and another only just attains significance at the $p = 0.045$ level.

Variable	aware (n=280)						unaware (n=195)					
	Load	S.E.	C.R.	P	R ²	error	Load	S.E.	C.R.	P	R ²	error
Fair share	1				0.40	0.60	1				0.29	0.49
One law	0.98	0.14	7.2	0.000	0.30	0.90	1.23	0.34	3.6	0.000	0.46	0.37
Priv ent	1.47	0.17	8.9	0.000	0.57	0.65	0.37	0.18	2.0	0.045	0.04	0.67
Pub service	1.22	0.15	8.1	0.000	0.40	0.88	0.64	0.23	2.9	0.004	0.09	0.85
Govmnt.	1.06	0.15	7.2	0.000	0.30	1.05	0.80	0.24	3.3	0.001	0.13	0.86
unions	0.97	0.14	7.2	0.000	0.29	0.90	0.32	0.20	1.6	0.110	0.02	0.88

Table 3.8 Group comparison of Parameter estimates - BGES

The R² values were also considerably higher on all but one of the items in the politically aware group with the majority of these values in the unaware group being of near zero magnitude. Although the reliabilities of some of these indicators then are slightly higher in the unaware group than they were for the

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unaware respondents in the BHPS sample, they are still very modest and uneven across indicators, particularly in comparison to the values obtained for the aware sample which are, on average, four to five times higher. So, overall, the pattern of results in the BGES sample is very similar to that found with the BHPS; much less reliable estimates and much lower item R squared values in the politically unaware group.

3.7 Discussion

In this chapter Confirmatory Factor Analysis was used on two independent samples to test whether a one common factor solution would hold, firstly, for the whole population and then for groups differing in their level of awareness of and engagement in politics. For both the BHPS and the BGES data, the one factor model for the 'left-right' value dimension provided a satisfactory fit to the whole sample data: a range of Chi Square based measures of global model fit were above traditionally accepted cut-offs, parameter estimates were significant, in the expected direction and the variance explained by the common factor was in the region of 30-40% across the six indicator items. However, when a more fine-grained approach was taken and the sample stratified by level of political awareness, it was very apparent that, amongst the less politically aware, the one factor model provided a much poorer characterisation of the observed data.

For the politically unaware respondents in both samples, the standard errors of the factor loadings were higher - reflecting an indeterminacy that, it was argued, results from a poorer comprehension and an inability to answer these questions in a meaningful way amongst this group of respondents. The proportion of variance in the observed items accounted for by the common factor was also consistently and significantly lower in the politically unengaged groups. Although objections may be raised about the exact 'meaning' or interpretation of each of these individual model parameters as

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measures of the constraint aspect of political sophistication, the overall picture seems fairly conclusive; only those respondents who are interested and engaged in the political process seem to see these issues as particularly related to one another or to order their responses to the individual items in relation to a higher order 'left-right' value dimension in anything other than a weak or ephemeral way.

When it is remembered that, due to differential unit and item nonresponse, many of the least politically aware and engaged members of society are likely to be completely omitted from these estimates, it is apparent that the true divergence in belief system organisation between groups at the extremes of political awareness is likely to be even greater than these estimates would lead us to believe. Furthermore, in comparison to previous investigations of inter-item association, the 'left-right' scale items should probably be expected to exhibit greater consistency than the types of item traditionally examined. The latter have usually been selected *ad hoc* rather than on the basis of their scalability and have therefore been more disparate, covering areas that range from racial equality to economic individualism and foreign policy in the same analysis. So for this reason too, it would be advisable to consider these estimates of belief system structure as representing something of an upper bound. Furthermore, repeating these analyses on the same sample groups but using the six item 'libertarian-authoritarian' scale (data not shown), also developed by Heath et al (1993), provides a virtually identical pattern of results. The findings would not appear, therefore, to be isolated to this particular value dimension.

The primary implications of these results, I would argue, are twofold: that only a small number of the less politically aware respondents make only slight use of a higher order 'left-right' value dimension to order their positions on these six individual items *and* that the political attitudes (represented by the indicators) that this group of respondents do hold are much weaker and more

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labile. Thus we fail to find evidence of a strong 'left-right' value dimension amongst this group of respondents both because it is actually present to a much lesser extent but also because the individual survey items used to measure this directly unobservable construct are disproportionately high in random variance due to the weak nature of the attitudes they tap. Having focused in this chapter on whether the mass public can be said to possess higher order value dimensions at all, the following chapter extends the analysis to examine the extent to which such values/beliefs, where apparent, can be said to lend coherence to more proximal political attitudes further down in the belief system hierarchy.

4 HIERARCHICAL BELIEF SYSTEMS: THE ROLE OF CORE VALUES

As was discussed in the previous chapters, a key element in recent approaches toward the study of PBSs has been that superordinate value dimensions serve to order and lend coherence to attitudes toward more proximal issues lower down in the belief system hierarchy. Kinder (1983) has argued that the focus of the 'minimalist' paradigm of belief system research on demonstrating the public's lack of political sophistication has meant that we know more about how people do not think about politics than about how they do. If, as now seems generally accepted, people do not use generalised, uni-dimensional ideologies to structure their attitudes toward political issues then what, if anything, gives meaning and direction to these cognitions? As Feldman puts it "People may not view the world in ideological terms but they do have political attitudes, beliefs, and preferences that need to be explained" (1988, p. 416).

In recent years several authors have proposed the idea that a loosely interconnected set of fundamental or 'core' values, akin to Converse's "survival of the fittest in the spirit of social Darwinism", are where belief system structure amongst the mass public is to be found (Conover and Feldman 1984, Feldman 1988, Heath, *et al.* 1996, Heath, *et al.* 1993, Peffley and Hurwitz 1985, Peffley and Hurwitz 1987). The main thrust of these approaches is that (a) constraint should more appropriately be viewed as a vertical rather than a horizontal phenomenon and (b) that 'ideology' should be conceived as a cluster of domain specific values rather than a general monolithic entity. Hurwitz and Peffley (1987) for example, find that while individual foreign policy items are only weakly inter-related amongst the American public, they are nevertheless strongly related to foreign policy 'postures' which are, in turn, constrained by a set of irreducible or core beliefs about international relations. In many ways

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such formulations are much closer to Converse's original treatment of belief system structure and attitude constraint than studies which have tended to adopt a static, uni-dimensional conception of ideology, which are perhaps more pertinent to discussions of the cold war than the debate over the political sophistication of the general public.

In chapter three Confirmatory Factor Analysis (CFA) was used on a specially designed six item scale to assess the extent to which such a higher order 'left-right' political value dimension could be said to underlie responses to the more proximal attitudes represented in the scale items. Results indicated that, while this may be the case for the public as a whole – and particularly for the more politically aware echelons of society – it could not be said to characterise the responses of the least politically aware and involved. Although the 'left-right' dimension represents only one of several possible core beliefs and values amongst the British public, it is probably the most important and repeating the analyses on a similar six item scale representing the 'libertarian-authoritarian' value dimension produced essentially identical results. In this short chapter, the analysis of chapter three is extended to examine, not just whether the measurement model is satisfactory, but also whether the 'left-right' value dimension does in fact lend some sort of 'vertical' coherence to related attitude items further down in the belief system hierarchy.

4.1 Data

The data used were again from wave one (1991) of the British Household Panel Study (BHPS) and the 1997 British General Election Study (BGES). The designs of these surveys are described in detail in section 3.4. The sample size was 3093 for the BGES and 9912 for the BHPS.

4.2 Method

In order to evaluate the validity and generality of the core beliefs and values perspective, the measurement model fitted in chapter three is extended to include regression paths between the 'left-right' value dimension and more policy oriented attitude variables – hypothesised to be related to left-right political orientation - which respondents were asked about at a different stage in the interview schedules. Figure 4.1 shows the path diagram for the structural model fitted to the whole sample BGES 1997 data (see section 3.5.1 for a discussion of structural equation modeling). The measurement part of the model is the same as that presented in Figure 3.1, the structural component is added by incorporating four regression paths such that the 'left-right' latent variable predicts positions on four other single item latent variables.

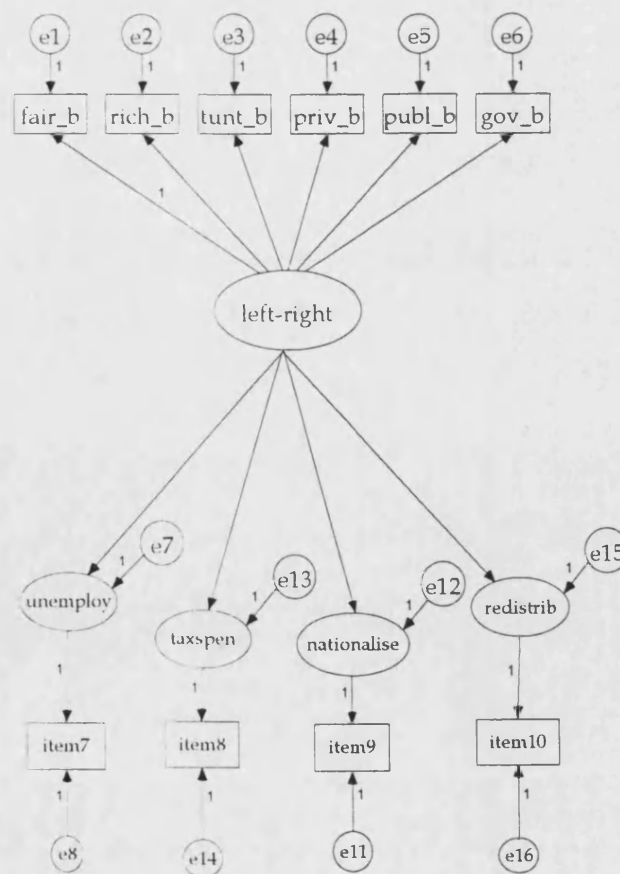


Figure 4.1 Path Diagram for Structural Model BGES 1997

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The four new dependent variables were measured on 11 point scales and address issues which have traditionally divided opinion along partisan left-right lines: maximising employment v minimising inflation (item 7); the balance between public spending and taxation (item 8); the balance between state and private ownership of industry (item 9); and the degree to which government should seek to make people's incomes more equal (item 10). Full wordings are provided below.

Questions used for Dependent variables in BGES structural model

Item 7 – Unemployment v Inflation

Some people feel that getting people back to work should be the government's top priority. These people would put themselves in Box 1. Other people feel that keeping prices down should be the government's top priority. These people would put themselves in Box 11. And other people's views are somewhere in-between. Please tick whichever box comes closest to your own view about unemployment and inflation.

Item 8 – Taxation and Government Spending

Some people feel that government should put up taxes a lot and spend much more on health and social services. These people would put themselves in Box 1. Other people feel that government should cut taxes a lot and spend much less on health and social services. These people would put themselves in Box 11. And other people's views are somewhere in-between. Please tick whichever box comes closest to your own view taxes and government spending.

Item 9 – Nationalisation and Privatisation

Some people feel that getting government should nationalise many more private companies. These people would put themselves in Box 1. Other people feel that government should sell off many more nationalised industries. These

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people would put themselves in Box 11. And other people's views are somewhere in-between. Please tick whichever box comes closest to your own view about nationalisation and privatisation.

Item 10 – Redistribution

Some people feel that government should make much greater efforts to make people's incomes more equal. These people would put themselves in Box 1. Other people feel that government should be much less concerned about how equal people's incomes are. These people would put themselves in Box 11. And other people's views are somewhere in-between. Please tick whichever box comes closest to your own view about redistributing income.

Intuitively, we should expect a high degree of predictive validity from regressing these items on the left-right value dimension, as the content domains have a high degree of overlap and all the individual items are, on the face of it, strongly related to one's position on the 'left-right' political value dimension. Or, to put it another way, if there is little relation between respondents' positions on the 'left-right' value dimension and their expressed attitude toward the balance between taxation and public spending, the validity and utility of either or both of these measures should be seriously called into question.

Before reporting on the results of these structural models, it is necessary to point out that, while conventional wisdom holds that latent variables measured with only one indicator in structural equation models are generally 'a bad thing' (Bollen 1989), in this instance - while perhaps not being optimal from a purely statistical standpoint - there is an underlying logic and rationale for their use, above and beyond simple expediency. For one of the contentions made about the role of core beliefs and values is that they can be used to explain the apparent fragility and lability of responses to single item measures, on which much of the nonattitude research literature is based. For example,

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the study mentioned earlier by Peffley and Hurwitz (1987) used a higher order factor to explain how single item measures of attitudes toward aspects of foreign policy could be seen to have some genuine and meaningful relation with attitudes towards other foreign policy issues. However, while aggregation of items into summed scales and the use of latent constructs measured by multiple items undoubtedly improves measurement reliability, this should not obviate the need to understand the processes underlying responses to single item measures. Core beliefs and values have been proposed as a means of introducing a level of meaning and internal structure to individual issue positions and it is this contention that is put to the test in this chapter⁴⁴.

4.3 Results

Fit statistics for the BGES whole sample structural model ($n = 3093$) indicate that the model fits the observed data quite well. Although a Chi Square value of 468 on 29 degrees of freedom ($p < 0.000$) indicates a lack of exact fit, parsimony and sample size adjusted indices were above conventional cut-off criteria for acceptable model fit ($CFI = 0.992$). Fitting covariance paths between error terms, as with the analyses reported in chapter three, significantly improved the overall fit of the model as assessed by the unadjusted value of Chi Square. However, including these paths in the model was again avoided on the grounds that it is better to stick with one's theoretically derived model than to maximise global fit by capitalising on chance sampling variation. In this regard, it is also worth noting that including the covariance paths between the error terms suggested by the modification indices had no real impact on

⁴⁴ However, it should be noted that when a single common factor was derived from these four items and used as a single dependent variable, the same general pattern of results was obtained as reported for the four single indicators analysis in this chapter.

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the direction and magnitude of the structural paths, which are the primary parameters of interest in this analysis.

The unstandardised factor loadings, regression paths (in bold), standard errors, critical ratios and R^2 values for the whole sample BGES 1997 data are presented in Table 4.1. Note also that, while the factor loadings from the scale items to the 'left-right' latent variable have changed slightly due to the addition of the new regression paths, the factor *pattern* is identical and the absolute magnitudes are very close to those estimated in the initial measurement model (Table 3.6).

	Loading	S.E.	C.R.	P	R ²	Error
fair share	1				0.34	0.60
One law	0.94	0.045	21	0.000	0.27	0.74
Priv. Ent.	1.03	0.045	23	0.000	0.34	0.63
Pub. Services	0.87	0.046	19	0.000	0.21	0.90
Government	0.87	0.045	19	0.000	0.21	0.87
Strong Unions	0.85	0.045	19	0.000	0.20	0.90
unemploy	1.29	0.115	11	0.000	0.39	6.45
nationalise	2.41	0.128	19	0.000	0.69	5.50
taxspen	1.29	0.097	13	0.000	0.39	4.06
redistrib	3.10	0.145	21	0.000	0.79	5.90

Table 4.1 Parameters for whole sample BGES 97 Structural Model

All four regression paths are significant and in the expected direction – those on the left favouring reducing unemployment over minimising inflation, higher taxation and public spending, more nationalisation and income redistribution. Reservations about the properties of R^2 notwithstanding (see section 3.7.1), the range of 40-80% for these values indicates that for the public as a whole, the 'left-right' value dimension seems to have a strong predictive relationship with these single item policy attitude measures. The results of this aggregate population analysis supports the contention that the six items of the 'left-right' scale are all constrained by a higher order value dimension, which

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in turn predicts respondent positions on more concrete policy related attitudes toward fiscal and macro-economic policy.

A similar structural model was also fitted for the whole sample 1992 BHPS data ($n = 9912$). However, as the BHPS is a multi-purpose survey with only a short block of questions on political attitudes, the range of items to choose as dependent variables in the model was very limited. After reviewing the potential items, only one was thought to be of sufficient relevance to the 'left-right' value dimension to be included in a structural model as a dependent variable, and this to only a very limited extent. The item was measured on a five point agree/disagree Likert scale and tapped the respondent's attitude toward whether employers should have to make special arrangements so that mothers can combine work and childcare. It was hypothesised that those on the left would be more in favour of this policy and those on the right more opposed. The wording for this item is provided below.

Question Wording for Dependent variables in BHPS structural model

"Employers should make special arrangements to help mothers combine jobs and childcare".

The item was included in the model as a latent variable measured by one indicator with zero error. The path diagram for the BHPS structural model is shown in Figure 4.2 and the parameter estimates for the model are provided in Table 4.2. A Chi Square value of 870 on 9 degrees of freedom again indicates that the exact fit of the model is poor, although, as has already been pointed out, with such a large sample this is to be expected. Using modification indices to select additional covariance paths between error terms of the indicators substantially improved the fit of the model but left the structural path unaltered and so were not retained in the final model. The adjusted measures

of overall fit were again, however, well above generally accepted cut-off criteria (CFI = 0.993).

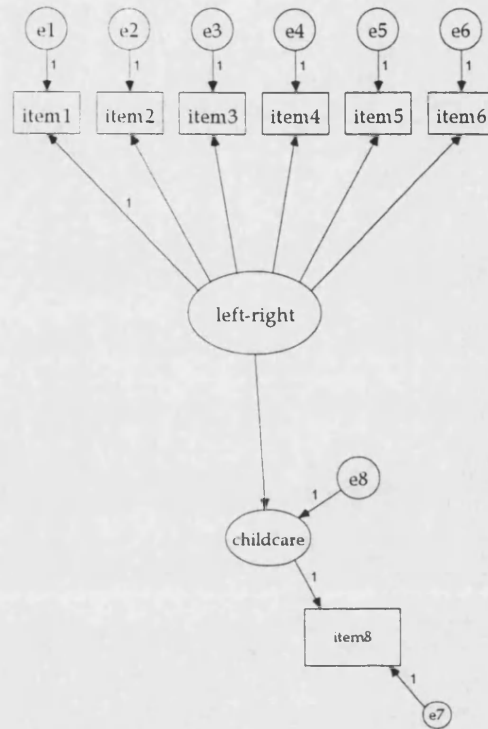


Figure 4.2 Path Diagram for Structural model BHPS '92 Whole sample

As with the BGES data, the factor loadings between the six items and the left-right latent variable are more or less identical to those estimated at the measurement stage, so the addition of the structural path has little impact on the scaling properties of the construct. The parameter of greatest interest in Table 4.2 is the unstandardised regression coefficient between the 'left-right' factor and the attitude toward childcare provision variable (in bold), which is significant and in the expected direction (0.46 (s.e.=0.05), $p < 0.001$), although of a relatively low magnitude. The percentage of variance explained in this variable (R^2) by the latent factor is extremely meagre at 0.02, indicating that, while the 'left-right' value dimension does have a reliable, systematic effect on attitude toward childcare provision by employers, the 'strength' of the effect is

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negligible. However, this should not necessarily be seen as particularly damaging to the validity of the left-right latent construct as we would not really expect an especially strong effect of left-right political orientation on this policy attitude.

	Loading	S.E.	C.R.	P	R2	Error
fair share	1				0.27	0.85
One law	1.10	0.03	33.7	0.000	0.32	0.82
Priv. Ent.	1.00	0.03	32.4	0.000	0.28	0.81
Pub. Services	0.90	0.03	29.7	0.000	0.21	0.97
Government	1.08	0.03	32.3	0.000	0.27	1.00
Strong Unions	1.06	0.03	32.0	0.000	0.26	1.00
childcare	0.46	0.05	10.4	0.000	0.02	3.12

Table 4.2 Parameters for whole sample BHPS 92 Structural Model

Having established that the structural model fits the data for the whole sample for both the BGES and the BHPS, the next stage of the analysis was to determine whether the same models would hold when applied to the less politically aware respondents. The same structural model was therefore fitted to the two sub-groups differing in level of political awareness and engagement derived in chapter three (see section 3.5.2 for a description of the group formation criteria). As was mentioned in chapter three, there is a long-standing methodological debate concerning the separation of the measurement from the structural stage in SEM. One school of thought argues that if the measurement model does not hold, one should not progress to the structural stage of analysis at all (Anderson and Gerbing, 1992). Others argue that the distinction between the measurement and the structural stages is a false one and that analysis should proceed directly to modeling causal paths between latent constructs without having to first verify the measurement model (Fornell and Yi, 1992).

For the purposes of this chapter, it was decided to move on to the structural model for the politically unaware group in the BGES '97 despite the poor fit

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obtained at the measurement stage. Thus, when considering the results from the structural modeling, the poor fit of the model to the unengaged group of respondents at the measurement stage should be borne in mind. Table 4.3 shows the unstandardised factor loadings, regression paths, critical ratios, standard errors and R² values for the politically aware and unaware groups from the 1997 BGES. The overall fit of the model is again high for the adjusted fit indices (CFI=0.994; RMSEA=0.042; Chi Square=106, df= 58, p=0.000) and the unstandardised factor loadings are nearly identical to those estimated at the measurement stage (see Table 3.8 for comparison). As also was the case for the measurement model, two of the most obvious between group differences are the standard errors and the R² values – with the unaware group having standard errors around twice the size of the aware group.

Variable	<i>Aware (n=280)</i>						<i>Unaware (n=195)</i>					
	Load	S.E.	C.R.	P	R ²	Error	Load	S.E.	C.R.	P	R ²	Error
fairshare	1.00				0.40	0.59	1.00				0.28	0.50
One law	0.97	0.13	7.7	0.000	0.29	0.90	1.22	0.31	3.92	0.000	0.44	0.38
Priv. Ent.	1.45	0.15	9.8	0.000	0.56	0.66	0.41	0.19	2.18	0.029	0.05	0.67
Pub. Services	1.22	0.14	8.7	0.000	0.40	0.88	0.69	0.23	2.98	0.003	0.10	0.85
Government	1.07	0.14	7.8	0.000	0.30	1.04	0.81	0.25	3.29	0.001	0.13	0.86
Unions	0.93	0.13	7.4	0.000	0.27	0.92	0.38	0.21	1.85	0.064	0.03	0.88
unemploy	1.81	0.33	5.5	0.000	0.62	6.70	-0.46	0.64	-0.73	0.466	0.01	7.94
nationalise	3.40	0.38	9.0	0.000	0.85	4.62	0.51	0.62	0.83	0.406	0.01	6.72
taxspen	1.63	0.27	6.1	0.000	0.57	3.80	0.99	0.56	1.76	0.079	0.04	5.44
redistrib	3.59	0.39	9.1	0.000	0.87	4.80	1.41	0.68	2.08	0.037	0.05	7.82

Table 4.3 Group Comparison Structural Model BGES 97

The differences are particularly marked for the four new regression paths; highly significant and with R² values in the range .6-.9 for the politically aware respondents but only one of the four paths reaching statistical significance (p < 0.05) in the unaware group and R²s in the range .01-.05. The effects sizes, as measured by the unstandardised regression coefficients, are some two to three times larger in the politically aware group as well as being considerably more reliable (as indicated by the lower standard errors).

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Furthermore, the path to the item which asks about the balance between unemployment and inflation even reverses sign in the unaware group such that those on the left are *more* likely to support inflation restraining measures over initiatives to reduce unemployment (although this estimate was highly non-significant). The difference in parameters across the two groups is further illustrated in Table 4.4 which shows the fit indices for a series of nested models which progressively constrain parameters to equality across groups. Loss of fit due to the imposition of between group equality constraints is assessed by comparing the fit of each model to the baseline model (model I).

Model	Chi2	df	CChi2	Cdf	sig.	CFI
I	106	58	-	-	-	0.994
II	121	63	15	5	0.010	0.993
III	130	64	24	6	0.001	0.992
IV	114	59	8	1	0.004	0.993
V	107	59	1	1	0.333	0.994
VI	115	59	9	1	0.003	0.993
VII	111	59	5	1	0.027	0.994

I	No constraints
II	Factor Loadings equal
III	Error Variances equal
IV	Regression path 1 equal
V	Regression path 2 equal
VI	Regression path 3 equal
VII	Regression path 4 equal

Table 4.4 *Nested Structural Model Comparison BGES 97*

Given the relatively small sample sizes of these two groups, the Chi Square difference test is an appropriate measure of loss of fit between nested models. As was the case for the measurement model comparison in chapter three, neither the factor loadings nor the error variances are equal across groups and, of the four regression paths, only one can be argued on these criteria to be the same in both groups – and even this one is non-significant ($p < 0.05$) in the politically unaware group (path 2 which predicts respondent attitude toward the balance between taxation and public spending). As probably the most emblematic issue of the left-right conceptual domain, this result is particularly

surprising; if we cannot see any relationship between position on the left-right political value dimension and attitude toward taxation and public spending, we must seriously consider the validity of the constructs we have attempted to measure or, and this is perhaps more to the point, whether this value dimension can really be said to exert any organising influence all on more proximal political attitudes amongst the less politically aware and unengaged members of the sample.

In conjunction with the analyses reported in chapter three then, the results of this between-group comparison for the BGES show that, while respondents who are interested in and knowledgeable about politics possess a strong, underlying 'left-right' value dimension which serves to order their responses to individual, policy related attitude items, the same certainly can not be said of those respondents who are unaware about and uninterested in the political process. For these individuals the evidence suggests that, if they can be said to possess a left-right political orientation at all, it is only very weakly felt and has virtually no relation whatsoever with their expressed attitudes toward issues of great relevance to left-right political discourse.

To check the robustness of these conclusions, the BHPS structural model was also tested across political awareness groups. As was the case for the measurement model reported in chapter three, the best fitting model was the one which had equal factor loadings across groups ($\chi^2=136$, $df=33$, $p = 0.000$; CFI=0.993; RMSEA=0.049) but unequal error variances of the indicators. The imposition across groups of equal regression paths between the 'left-right' value dimension and the attitude toward childcare provision was not supported by the overall fit statistics – with these constraints significantly reducing the fit of the model. Table 4.5 shows the parameter estimates for both groups for the best fitting model.

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Variable	aware						unaware					
	Load	S.E.	C.R.	P	R ²	Error	Load	S.E.	C.R.	P	R ²	Error
fair share	1				0.48	0.68	1				0.10	1.08
One law	1.1	0.07	16.5	0.000	0.48	0.83	1.1	0.07	16.5	0.000	0.17	0.71
Priv. Ent.	1.2	0.07	17.9	0.000	0.59	0.67	1.2	0.07	17.9	0.000	0.18	0.87
Pub. Services	1.0	0.07	15.5	0.000	0.42	0.94	1.0	0.07	15.5	0.000	0.12	0.99
Government	1.1	0.07	16.0	0.000	0.45	0.91	1.1	0.07	16.0	0.000	0.14	0.89
Strong Unions	1.2	0.07	16.6	0.000	0.49	0.91	1.2	0.07	16.6	0.000	0.13	1.11
childcare	0.6	0.10	5.9	0.000	0.07	2.96	-0.45	0.41	-1.1	0.27	0.01	5.24

Table 4.5 Group Comparison Structural Model BGES 97

The factor loadings are the same in each group because the model constrained these values to equality without significant loss of exact fit. The actual factor loadings, R² values and error variances are very close to those estimated at the measurement stage in chapter three, showing that the addition of the structural path had little impact on the scaling properties of the latent variable. The regression path between the left-right value dimension and the attitude toward childcare variable was only significant in the politically aware group ($p < 0.001$) with an R² higher than that for the whole sample but still very meagre at only 0.07. In the unaware group, the sign of the regression parameter was negative, the standard error was almost equal to the coefficient and was therefore highly non-significant, having no discernible effect on the attitude toward childcare variable (R² = 0.01). So the BHPS analysis supports the findings from the BGES; the hypothesis that the 'left-right' value dimension serves to order opinions toward more concrete policy issues was supported only in analyses conducted on the whole population sample or the group of politically aware respondents. For the less politically aware respondents, poor fitting models with non-significant regression paths and low explanatory power were the norm.

4.4 Discussion

The aim of this chapter has been to build on the results of chapter three to look at the extent to which the general public use abstract, higher order value dimensions to structure their positions on single item, policy-related attitude questions. Chapter three used CFA to focus on the relatively simple issue of whether the general public and selected sub-groups thereof actually possess abstract, higher order cognitive structures such as the 'left-right' value dimension. In this chapter the analysis was extended to examine the function and utility of these core values in addressing the question of whether responses to a range of policy related attitude questions are seen as inter-related or constrained in a 'vertical' manner by higher order values and beliefs exerting a cohering influence 'from above'. Crucially, however, the investigation extended beyond aggregate analyses of the entire population to examine whether this model of belief system structure would hold, not just for the whole population but also for groups with low levels of political awareness, interest and engagement. When looking at the whole sample in each survey, the structural model fitted well – regression paths from the 'left-right' latent construct were highly significant and explained around half the variance in the policy related dependent variables (although the R^2 was significantly lower than this in the BHPS analysis, this was to be expected given the marginal relevance of the issue addressed by the dependent variable to left-right political debate).

However, this model did not hold when fitted to just the less politically aware respondents. For the BGES analysis, only one of the four regression paths from the 'left-right' construct to the policy related variables attained statistical significance ($p < 0.05$) amongst this group of respondents and even this path had an effect size less than half the magnitude of that found amongst the politically aware group. In contrast to this, the politically aware sub-group showed large and highly significant regression paths and item R^2 values in the range 60-90%. The overall picture to emerge from the analyses in chapters

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three and four then, is that the degree to which the six items of the left-right scale are internally consistent is far from uniformly distributed within the general public. Groups low in political awareness and engagement do not really seem to see them as particularly inter-related, or as being derived from an over-arching value dimension in the way that more politically aware respondents clearly do. This lack of inter-item constraint, I would argue, is not just a function of non-ideological belief system organisation but also results from nonattitudes – a large number of respondents who are not interested or knowledgeable about politics providing essentially random responses which attenuate whatever actual inter-item associations may exist in this group.

These results, then, would appear to offer support for the contention that significant proportions of the general public lack basic political competencies such as attitude holding and hierarchical belief system structure – deficiencies which seem to derive from a lack of political awareness. In the next chapter, panel data is used in order to add an important time dimension to the analyses already conducted. This will allow a consideration and evaluation of how political awareness is related to the consistency, not just between responses to different items at one point in time, but between responses to the same item at different points of measurement.

5 LONGITUDINAL ATTITUDE STABILITY

In chapters three and four Confirmatory Factor Analysis and Structural Equation Modeling were used to investigate the extent to which the general public use higher order value dimensions to structure their attitudes toward specific policy issues. It has often been suggested that the reason for the low inter-item and longitudinal consistency commonly observed on such political attitude items is due, not to a lack of internal consistency or to nonattitudes, but to a misconceptualisation of how Political Belief Systems are really organised and that to incorporate a *vertical* dimension would substantially enhance the observed structure and consistency of mass political attitudes. Results indicated that, while this may be true when talking about the population as a whole, when specific sub-groups with low levels of political interest, engagement in and knowledge of politics are examined, this picture does not hold. Not only do such groups exhibit only very weak relationships between underlying value dimensions and specific policy positions, in many respects it can be argued that they do not possess such higher order value dimensions at all, at least insofar as they lend coherence to individual attitudes. Using a specially designed scale to measure the left-right political value dimension in two independent, nationally representative surveys, it was found that a one factor model was only just supported, or not supported at all, in groups low in political knowledge, interest and engagement. Where the model did hold, it was only very weakly related, or not related at all to more proximal attitudes toward specific areas of economic policy.

This supports the contention, discussed in chapters one and two, that there exist within the mass public, sub-groups of individuals who cannot be said to hold meaningful or well-thought out attitudes toward the major political issues of the day. As we cannot be confident that the distribution of aggregate opinion would be unaffected by attitude change amongst these individuals if

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they were to become more politically aware and involved, there is the real possibility that this uneven distribution of political sophistication results in an imbalance in political efficacy at the individual and group level resulting from a failure to derive attitudes consistent with self and group interests. In chapters six and seven I take a more causally focused approach to the relation between knowledge and attitude which sheds some light on this latter question. First, however, I extend the models presented in chapters three and four to incorporate a longitudinal dimension to the analysis.

5.1 Incorporating a Longitudinal Dimension

Despite the usefulness of the analyses presented in chapters three and four for assessing the nature and extent of cleavages in political sophistication within the general public, they do not provide a complete coverage of the sources of variation in responses to survey attitude items. In order to achieve this, it is necessary to introduce a time element to our data, because in cross-sectional analyses only the non-random variation *between* different items is captured. With longitudinal data structures, the systematic variation within the same item at different points in time can also be isolated, allowing a simultaneous estimation for any repeated item, of the variance due to underlying common factor(s) (such as the 'left-right' value dimension), the variance due to unique attributes of the item (such as question format and wording) and the unexplained or residual variance.

Longitudinal data, therefore, provide a more complete account of the random and systematic sources of variation within any given survey item and, following the approach of the previous chapters, the proportions of variance falling within each category can be compared across groups differing in their level of political awareness and involvement. Thus, while chapters three and four were only able to address the issue of constraint between items at one point in time, here the addition of a longitudinal dimension to the data will

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enable an examination of both the constraint between items and the longitudinal stability in the same attitude over time. Several different models are appropriate for this decomposition of variance task (see Judd and Milburn 1980, Raffalovich and Bohrnstedt 1988, Saris 1982) but here I employ a three wave longitudinal factor model with common and unique factors to account for item variance at each time point. However, before discussing in detail the exact specification of the model to be used, I shall turn to a brief consideration of the subject of attitude stability and how this relates to both the validity and reliability of survey measures of political (and other) attitudes.

5.2 Causes and Correlates of Longitudinal Instability

When thinking about the causes of longitudinal response instability in survey attitude items, at least three possible explanations of the phenomenon exist: (1) the person has an attitude but the attitude has changed over time (2) the person has an attitude which has not changed but, for some reason, they have failed to select the 'correct' (from the researcher's point of view) response alternative at one or more points of measurement and (3) the person does not have an attitude and has randomly selected different response alternatives at different waves. The first of these explanations constitutes the primary underlying rationale for collecting longitudinal attitudinal data in the first place, the second is an inherent defect of all measurements of directly unobservable phenomena, while the latter represents the cornerstone of the nonattitude thesis. Leaving aside explanation (2) for the moment, it is clear that in standard approaches to panel data, attitude change and random responding are confounded, rendering the use of response instability problematic as an indicator of nonattitudes (Iyengar 1973). The key drawback is, of course, that there is no obvious means of determining, at the individual level, to which of these two causes response instability should be attributed.

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However, given our standard definitions of the attitude (see section 2.1) and their reliance on the relatively *enduring* nature of the construct, it is clear that if someone actually does hold an attitude, we should expect a fairly high degree of stability when the same question is asked of the same individuals at different points in time. If this is not the case, it makes little sense to talk of attitudes (Batista-Fouget and Saris 1997). This expectation, of course, ignores the effects of random measurement error (or error deriving from the instrument rather than the respondent) but, as was discussed in section 2.1, the response instability I am concerned with here is that which is correlated with more or less fixed characteristics of the respondent, particularly their level of political awareness and involvement. If response instability is not reflective of weak or non-existent attitudes but of poor instrument design then we should no more expect its prevalence to vary with political awareness than we should with hair or eye colour.

Our unease about interpreting longitudinal instability as a function of nonattitudes rather than true change is also, no doubt, related to the apparent 'rationality' and 'responsiveness' of public opinion (Brody 1991, Ostrom and Smith 1992, Page and Shapiro 1992). A growing body of research has emerged over the past two decades showing that public opinion on policy related issues does not fluctuate wildly over time but is, in fact, rather stable. When it does shift, its direction of movement is usually connected with fairly predictable macro-social phenomena such as, for example, unemployment rates, economic growth and political scandal (Sanders and Price 1994, Sanders, *et al.* 1991). The public is thus "capable of sensible and sometimes fine-grained distinctions in the policies it recommends" (Kinder 1998, p. 798). It would seem perverse to suggest that such over-time responsiveness and 'rationality' at the aggregate level could be based on an underlying mass of essentially random responses.

Given this stability, rationality and responsiveness at the aggregate level, the actual amount of individual switching or 'churn' between repeated

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administrations of the same attitude question is surprisingly high (Johnson and Pattie 2000). On most items only around fifty percent of respondents select the same response alternative on two consecutive occasions, while up to a quarter actually switch sides (e.g. move from agreeing to disagreeing rather than merely adjusting their prior level of agreement or disagreement) (Zaller and Feldman 1992, p. 579). The 'churn' figures quoted by Zaller and Feldman are reflective of those found in the six items of the left-right scale on the 1997 BGES, with the proportion of respondents selecting a different response alternative between wave one and wave two (excluding those who selected a nonsubstantive alternative at either wave) ranging from 47% to 54% and the proportion switching between agree and disagree ranging from 9% to 16% over a two year period. These figures, of course, exclude those respondents who provided no data at all at wave two and are thus probably underestimates of the true level of instability for the whole wave one sample. Given that the marginal totals on these items changed only slightly between these two time points, it is highly unlikely that this individual level movement can be attributed entirely to true attitude change. What is most likely is that a combination of factors (1), (2) and (3) are at play, the problem is differentiating between the relative contributions of each.

Traditional approaches, such as bivariate or multivariate regression models which compare 'switchers' with 'non-switchers' across a range of background variables, although effective in demonstrating the non-random nature of response instability (see Evans and Lalljee 1997, , Feldman 1989) , are unable to effectively tackle the confounding of random responding⁴⁵ with true change (Iyengar 1973). This is all the more problematic as there is no means of assessing the nature of the relationship (if indeed one exists at all) between

⁴⁵ It is important to remember that random responding does not necessarily assume an equiprobability distribution across response alternatives. It could equally well imply a 'biased coin flip' distribution.

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true change and random responding: should we expect more or less random responding when more true change is occurring or is there actually no fixed relationship? This uncertainty further clouds the picture, as any relationship between background characteristics and random responding may be heavily attenuated (or for that matter, augmented) by the cancelling (or complementary) effect of the relationship between the same background characteristics and true change working in the opposite direction.

5.3 Using SEM to Model Longitudinal Instability

It is because of these limitations that SEM is a useful methodology for modeling longitudinal response stability. While the use of covariance structure modeling does not completely overcome the confounding problems faced by traditional methods described above, it does provide an alternative framework within which the longitudinal and cross-sectional sources of variance in attitude items can be identified and compared across groups. The general advantages of SEM have already been described in section 3.5.1 but, with a longitudinal data structure, further benefits accrue. Primary amongst these is the fact that, with a time dimension to the data, it is possible to accurately estimate the sources of variance in each item in terms of:

- (a) that which is shared by the same item across time points.
- (b) that which is shared by different items at the same time point.
- (c) that which is unexplained or residual.

These sources of variance may be represented as latent variables in a longitudinal factor model, as shown in Figure 5.1. The same six items of the Heath et al 'left-right' scale (see section 3.4 for full wordings of these items) are administered at three different time points and are represented by rectangles in the path diagram (itm1t1 = item 1 at time 1 and so on). At each wave the variance in any one item is assumed to be caused by a combination of two

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latent factors (represented by ellipses in the path diagram): a common factor (T 1, 2 & 3) which is constituted by that variance which is shared by the items at each wave, a unique factor (U1-6) which is constituted by that variance which is shared by the same item across waves and the residual or unexplained variance. Common and unique factors are orthogonal, so any variance attributed to one factor cannot also be attributed to the other. The variance of the items can therefore be decomposed as follows:

$$S^2_{xi} = 1.0 = \alpha^2_{iT} + \beta^2_{iU} + \Psi_i \quad (5.1)$$

where α^2_{iT} is the variance accounted for by the common factor (T), β_{iU} is the variance accounted for by the unique factor (U) and Ψ_i is the residual variance. Taking the standardised estimates of these parameters means that, together, they sum to unity.

It would be tempting to draw a simple interpretation here in which the α^2_{iT} is taken as a measure of cross-sectional constraint and the β_{iU} as a measure of longitudinal stability. The true picture, however, is slightly more complicated than this. The β_{iU} should more appropriately be regarded as the variance in each item which is seen consistently over waves as being unique to that item⁴⁶, while the α^2_{iT} should be regarded as the variance in each item which is seen as relating to the underlying common factor. In the present case, if the 'left-right' value dimension is important in structuring individual positions on these items, then the variance accounted for in each item by the common factor

⁴⁶ This uniqueness may equally well be a function of the question wording or format as the actual content of the item.

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should be high – particularly relative to that which is accounted for by the unique factor.

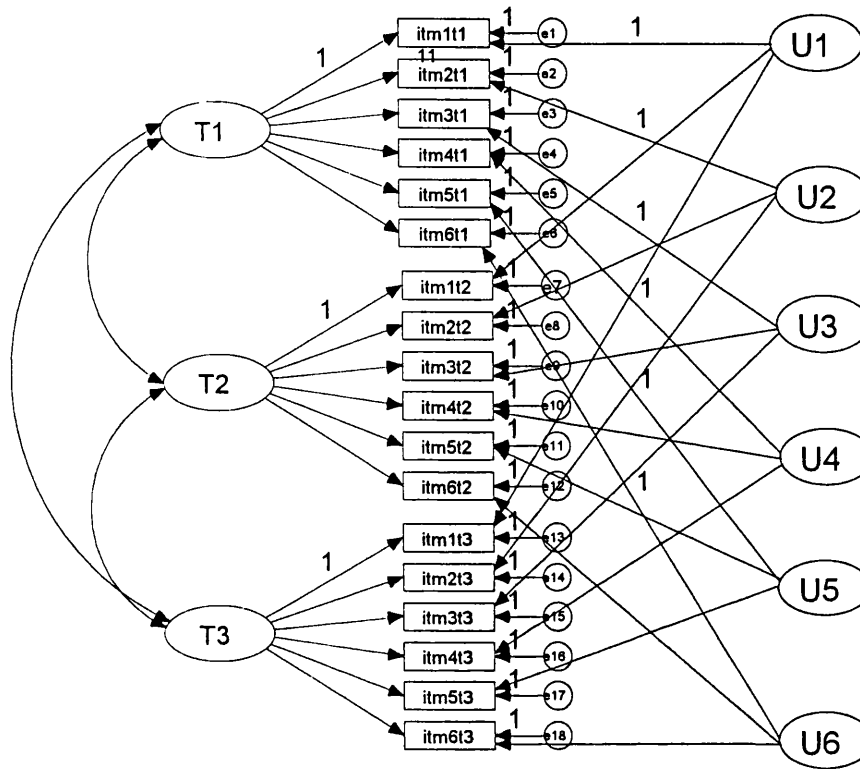


Figure 5.1 Longitudinal Common and Unique Factor Model

A high proportion of the overall item R^2 attributable to the unique factor, on the other hand would indicate that the item is not strongly related to the underlying common factor. The over time stability of the 'left-right' value dimension can be assessed by examining the covariances and correlations between latent common factors at each wave (represented by double headed curved arrows) once the errors in the measurement of the constructs have been controlled for.

5.4 Data

The data to be used in the analyses in this chapter come from the British Household Panel Study, waves one, three and five (1991, 1993 and 1995 respectively). The data is therefore the same as that which was used in chapters three and four, except this time two additional waves are incorporated into the analysis. Full details for wave one of this data set are provided in section 3.4. The sample size was reduced from 9567 at wave 1 to 6918 at wave 3 due to attrition⁴⁷. Only the BHPS data was used in this chapter as it was the only one of the two data sets for which the one factor measurement model fitted in all groups in chapter three. As the one factor model did not fit the data for the less politically aware respondents at wave one for the BGES data, it was not logical to examine its stability over time. This in itself has clear implications concerning the content and structure of the belief systems of the less politically aware and should be borne in mind when considering the implications of the analyses presented in this chapter for evaluating the political competence of the general public.

5.5 Results

5.5.1 Whole Sample Model

The longitudinal factor model shown in Figure 5.1 was fitted to the first three waves of the BHPS for the whole sample. Table 5.1 shows the Chi Square value and degrees of freedom for each of a series of nested models. Model I, which places no parameter constraints either within or across waves on the common and unique factor loadings and error terms, is the baseline model against which increasingly complex or constrained models may be compared. As Model I itself fits the observed data well (CFI = 0.994; RMSEA = 0.046), successive nested models with more parameters constrained that do not result

⁴⁷ Attrition here includes all categories of nonresponse – refusal, non-contact etc.

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in significant loss of fit may be accepted as more parsimonious representations of the data (Hayduk 1996). Also included in Table 5.1 are the change in Chi Square (CChi²) and change in degrees of freedom (Cdf) for each nested model along with three other measures of model fit (CFI; RMSEA; and ECVI⁴⁸). The best fitting model in Table 5.1, taking into account both exact fit, sample size and model parsimony, was found to be model VIII which is the model in which the common and unique factor loadings are invariant across waves, the over-time covariances between the common factor are constrained to equality and the latent variances are also equal between waves. Relative to model I, which imposed no over-time constraints, this model shows no increase in the value of CFI and a reduction in RMSEA.

Model	Chi ²	df	CChi ²	Cdf	p	CFI	RMSEA	ECVI
I	1762	114	-	-		0.994	0.046	0.276
II	1803	124	41	10	0.000	0.994	0.044	0.279
III	1791	119	29	5	0.000	0.994	0.045	0.279
IV	2302	126	540	12	0.000	0.992	0.050	0.351
V	1846	130	84	16	0.000	0.994	0.044	0.284
VI	1919	132	157	18	0.000	0.994	0.044	0.294
VII	1884	132	121	18	0.000	0.994	0.044	0.289
VIII	1943	133	180	19	0.000	0.994	0.044	0.297

I = no constraints

II = common factor loadings invariant across waves

III = unique factor loadings invariant across waves

IV = error variances invariant across waves

V = common and unique factor loadings invariant across waves

VI = V + invariant latent variances across waves

VII = V + invariant latent covariances

VIII = Invariant loadings, latent variances and latent covariances

Table 5.1 Nested Model Comparison BHPS Whole Sample

Thus, although the loss of fit is quite high as indicated by the Chi Square value (180 on 19 degrees of freedom), this more parsimonious model is still preferable, given the sample size. Invariance of error terms for the indicator

⁴⁸ These take model parsimony and sample size into account when assessing model fit – see section 3.5.1

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variables across waves could not be supported by the model – Chi Square increased by 540 on 12 degrees of freedom for this constraint (note also a large reduction in CFI and an increase in RMSEA and ECVI for this constraint). This is due to the increase in the proportion of variance explained in the indicator items by the latent and unique factors in waves two and three relative to wave one. Table 5.2 shows that there was a 10% average increase in the proportion of variance explained across the six items between waves one and two. As the proportion of variance accounted for in each item by the latent factor increases, the proportion of unexplained or residual variance must obviously decrease by a concomitant amount. Such an effect – known as the ‘Socratic’ effect – has been noted before in longitudinal research designs and is thought to result primarily from the increased familiarity of respondents with both the format and subject matter of the questionnaire items over repeated administrations (Batista-Fouget and Saris 1997, Campbell and Cook 1979, Jagodzinski, *et al.* 1987, McGuire 1960). Over a shorter time period, for example, Jagodzinski *et al.* found an average increase of 20% in proportion of item variance explained using a similar factor model. The fact that constraining error variances to equality across waves two and three does not result in significant loss of fit ($\chi^2 = 9$; $df=6$; $p=0.195$), supports this interpretation of the phenomenon as being related to knowledge or information gain because such a ‘practice effect’ should be only or predominantly apparent between the first two administrations of the questionnaire.

That the factor loadings of the common factor are invariant across waves is important, as it indicates that the same underlying value or attitude is being measured at each time point (McArdle and Nesselroade 1994). Had the factorial structure changed over time, we could not really be confident that the same ‘thing’ was being compared, as the meaning of the indicator items

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relative to the latent construct may have subtly shifted⁴⁹. With factorial invariance, however, any change in the parameters of the latent construct and in it's relationship with other constructs over time may be interpreted as *quantitative* changes in the relationship rather than as more fundamental, *qualitative* shifts in the meaning of the construct itself. Table 5.2 shows the parameter estimates for model VIII: unstandardized common and unique factor loadings (with standard errors and critical ratios), the error terms and the R² values for each item at each of the three waves.

Variable	Common loading	S.E.	C.R.	Unique loading	S.E.	C.R.	error term	R ²
<i>Wave 1</i>								
item1	1			1			0.64	0.42
item2	1.08	0.03	43.42	1			0.56	0.51
item3	1.03	0.03	41.84	1			0.56	0.49
item4	0.91	0.02	37.94	1			0.73	0.40
item5	1.03	0.03	38.30	1			0.62	0.54
item6	1.06	0.03	39.55	1			0.57	0.57
<i>Wave 2</i>								
item1	1			1.05	0.05	21.32	0.41	0.53
item2	1.08	0.03	43.42	0.92	0.04	24.83	0.39	0.57
item3	1.03	0.03	41.84	1.03	0.04	26.23	0.40	0.57
item4	0.91	0.02	37.94	1.06	0.03	39.85	0.56	0.46
item5	1.03	0.03	38.30	1.03	0.03	33.93	0.43	0.63
item6	1.06	0.03	39.55	1.00	0.05	22.38	0.39	0.65
<i>Wave 3</i>								
item1	1			1.05	0.05	21.32	0.38	0.54
item2	1.08	0.03	43.42	0.92	0.04	24.83	0.37	0.58
item3	1.03	0.03	41.84	1.03	0.04	26.23	0.37	0.59
item4	0.91	0.02	37.94	1.06	0.03	39.85	0.52	0.48
item5	1.03	0.03	38.30	1.03	0.03	33.93	0.42	0.63
item6	1.06	0.03	39.55	0.88 ⁵⁰	0.05	22.38	0.42	0.60

Table 5.2 Best Fit Model Parameters for Whole Sample BHPS

⁴⁹ For example, the issue of nationalisation may have a different meaning in the context of 'left-right' political debate now than it did in the 1970s.

⁵⁰ The parameters for the unique factor for this item were not constrained to be equal as when this constraint was applied the model was unidentified.

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The factor loading from the common factor to the item asking the respondent's opinion on whether 'ordinary people get a fair share of the nation's wealth' at each wave has been fixed to 1 in order to set the scale of the latent variable. The same has been done for the loading from each unique factor to the item that the factor represents at wave 1. All of the factor loadings in Table 5.2 are very close to 1, indicating that each item has a more or less equal effect on the underlying attitude⁵¹. This supports the use of these items as an additive scale, in which each item contributes an equal amount to the overall scale score, as advocated by Heath et al (1996, 1993).

All coefficients are highly significant ($p < 0.001$) and in the expected direction. Also of note in Table 5.2 are the error terms and R^2 values for each of the indicators. As was mentioned earlier, there is a clear increase in the amount of variance explained and a decrease in the residual variance on every item between wave one and waves two and three. Around 40-60% of the variance in each item is accounted for jointly by the two latent factors. It can also be seen that, for the majority of items, the common factor has the greatest explanatory power, although for a number of items – notably item 4 – the opposite is the case.

As was pointed out earlier, an advantage of the longitudinal dimension of the data is that it enables us to decompose the variance accounted for in each observed variable into its component parts – that which is accounted for by the common factor, the unique factor and the remaining variance which is unexplained or residual. In addition to the total R^2 , Table 5.3 shows the proportion of variance accounted for by the common and the unique factors

⁵¹ Indeed, constraining all these loadings to 1 did not significantly reduce the fit of the model.

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for each item at each wave and the difference between these two proportions⁵². The general picture, however, is one in which an almost equal contribution is made by the common and unique factors. In terms of the construct validity of the 'left-right' scale then, these estimates are not particularly encouraging. In order for a scale to have strong construct validity, the common factor should explain most of the variance in each of the indicator items and certainly should have greater explanatory power than the unique factor (Stevens 1995).

variable	common factor	unique factor	Difference	R ²
<i>wave 1</i>				
item1	0.26	0.16	0.10	0.42
item2	0.30	0.21	0.09	0.51
item3	0.28	0.21	0.07	0.49
item4	0.20	0.19	0.01	0.40
item5	0.23	0.30	-0.07	0.54
item6	0.25	0.32	-0.07	0.57
<i>wave 2</i>				
item1	0.30	0.23	0.07	0.53
item2	0.34	0.23	0.11	0.57
item3	0.30	0.27	0.04	0.57
item4	0.21	0.25	-0.05	0.46
item5	0.24	0.38	-0.14	0.62
item6	0.26	0.39	-0.12	0.65
<i>wave 3</i>				
item1	0.31	0.23	0.08	0.54
item2	0.34	0.23	0.11	0.58
item3	0.31	0.27	0.04	0.58
item4	0.22	0.26	-0.05	0.48
item5	0.25	0.38	-0.14	0.63
item6	0.28	0.32	-0.04	0.60

Table 5.3 Decomposition of variance BHPS whole sample waves 1-3-5

Considering the methodological rigour with which this scale was developed, it is unlikely that this effect is being caused by poor item selection/construction. A more plausible explanation is that many respondents in the sample as a

⁵² The proportion of variance accounted for in each item by each latent variable can be calculated by taking the square of the standardised factor loading from each indicator to the

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whole simply do not use an abstract 'left-right' value dimension to structure their political attitudes and that these respondents are attenuating the effect sizes between the common factor and each item for those that do. This hypothesis is evaluated empirically later in this chapter when the decomposition of item variance is compared across political awareness groups. The final parameters of interest in this model are the covariance paths between the latent construct at each wave as these speak to the issue of the stability of the latent 'left-right' value over time. Table 5.4 shows the variance of the common latent factor as well as the covariances and correlations between the common factor at each wave. All the correlation coefficients are close to .9, indicating near perfect stability of the latent attitude across the five years between the first measurement in 1991 and the last in 1995. This corroborates the findings of Heath et al (1993) who also found high stability estimates (.7) for the summated version of this scale over successive administrations⁵³.

Parameter	Estimate	S.E.	C.R.
Variance L1	0.26	0.01	27.3
Variance L2	0.26	0.01	27.3
Variance L3	0.26	0.01	27.3
Covariance L1 - L2	0.24	0.01	26.7
Covariance L1 - L3	0.24	0.01	26.7
Covariance L2 - L3	0.24	0.01	26.7
Correlation L1 - L2	0.89	-	-
Correlation L1 - L3	0.89	-	-
Correlation L2 - L3	0.89	-	-

Table 5.4 Variance and Covariance Parameters Whole Sample BHPS

latent variable.

⁵³ The higher correlations found in this study, despite the longer inter-wave lag are a result of the disattenuation effect caused by the correction for measurement error in the indicator items in SEM.

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5.5.2 Model for Politically Unaware Respondents

The next step in the analysis was to fit the three wave stability model to just the less politically aware group of respondents. However, sample attrition reduced the sample size from 596 to 360 over waves one to three in this group (a 40% loss). The net effect of this was that the measurement model no longer fitted the data – two of the common factor loadings became non-significant as well as a number of the unique factor loadings, meaning that the one common factor model was no longer supported in this group. The most probable explanation for this is the loss of sample size *per se* as the sample members lost through attrition would most likely have been the less politically interested and aware, meaning that the effect of attrition would have been in the direction of producing a better fit for the one factor model.

It should be remembered that many of the parameters of the cross-sectional one factor model fitted to this group in chapter three only just reached statistical significance at the $\alpha = 0.05$ level. The subsequent loss of sample size over successive waves of the panel was therefore probably sufficient in itself to reduce these unstable estimates below conventional significance levels. Therefore, because of the lack of fit of the common factor model to the less politically aware group, a less restrictive definition was applied to produce a new group in order that a longitudinal comparison could still be made between groups differing in level of political awareness. This new group was formed by selecting all those respondents who reported being 'not at all interested' in politics at wave 1⁵⁴ ($n = 1147$). Although not ideal as a 'stand-alone' measure of political awareness, this same self-reported interest item correlated 0.45 ($p < 0.001$) with the knowledge quiz in the 1997 BGES.

⁵⁴ A slightly more restrictive definition in which respondents who reported being 'not at all interested' across all three waves ($n = 452$) also did not fit the one factor model as there were several non-significant common and unique factor loadings.

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Table 5.5 shows fit statistics for each of a series of nested models for this group of politically uninterested respondents. As with the model fitted to the whole sample, the baseline model, model I, has no constraints placed on the parameters of the model either within or across waves. The best fitting model when applied to this group was found to be the same as that for the whole sample, with common and unique factor loadings, variances and covariances between common factors invariant over time (model VIII). The error terms of the indicator variables were again not invariant across waves (note the substantial loss of fit across all indices for Model IV). Model VIII fitted the data well with a CFI of 0.993 and RMSEA of 0.046. This model then forms the basis for comparisons with the more politically aware respondents in later analyses.

Model	Chi2	df	CChi2	Cdf	p	CFI	RMSEA	ECVI
I	262	111				0.997	0.034	0.365
II	280	121	17	10	0.067	0.996	0.034	0.363
III	273	117	10	6	0.119	0.997	0.034	0.363
IV	366	123	103	12	0.000	0.995	0.042	0.434
V	286	126	24	15	0.073	0.996	0.033	0.359
VI	295	129	33	18	0.018	0.996	0.034	0.362
VII	290	129	28	18	0.070	0.996	0.033	0.358
VIII	301	131	38	20	0.008	0.996	0.034	0.364

I = no constraints

II = common factor loadings invariant across waves

III = unique factor loadings invariant across waves

IV = error variances invariant across waves

V = common & unique factor loadings invariant across waves

VI = common & unique loadings and latent variances invariant across waves

VII = common & unique loadings and latent covariances invariant across waves

VIII = common & unique loadings, latent variances & covariances invariant across waves

Table 5.5 Nested Model Comparison BHPS Uninterested Respondents

5.5.3 Model for Politically Aware Respondents

The same set of nested models was then fitted to data from the politically aware group of respondents. While this group also had a reduced sample size due to attrition over waves (509 from 698), the effect was less pronounced than in the less aware group (27% compared to 40% of the sample lost) and the fit of

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the measurement model at wave one was unaffected. Table 5.6 shows the corresponding fit indices for the models fitted to this group of politically aware respondents. The best fitting model for this group was also exactly the same as that for the whole sample (model VIII): the common and unique factor loadings were invariant across waves, the covariance terms between common factors were set to equality and the latent variances were equal over waves. Error terms for the indicator variables were again not invariant across waves one and two, suggesting that the 'Socratic' effect from familiarity with the questions and the issues they address, is also evident amongst this more knowledgeable group of respondents.

Model	Chi2	df	CChi2	Cdf	CFI	RMSEA	ECVI
I	286	114	-	-	.992	.055	.858
II	302	124	16	10	.992	.053	.851
III	299	120	13	6	.992	.054	.861
IV	380	126	94	12	.988	.063	.996
V	314	130	28	16	.991	.053	.852
VI	351	132	65	18	.990	.057	.915
VII	339	132	52	18	.990	.056	.891
VIII	357	134	71	20	.990	.057	.920

I = no constraints

II = common factor loadings invariant across waves

III = unique factor loadings invariant across waves

IV = error variances invariant across waves

V = common & unique factor loadings invariant across waves

VI = common & unique loadings and latent variances invariant across waves

VII = common & unique loadings and latent covariances invariant across waves

VIII = common & unique loadings, latent variances & covariances invariant across waves

Table 5.6 Nested Model Comparison BHPS Politically Engaged Group

So, the results from this first stage of analysis show that the best fitting model is more or less the same in each group - with the factor loadings for both the common and unique latent variables invariant across waves. In both groups the covariances between the common factors at each time of measurement are equal but the error terms of the indicator variables are different between waves one and two. This parity of the best fitting models across groups allows

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us to move on to a closer examination of between group differences in both the strength and the stability of the 'left-right' value dimension.

5.5.4 Model Comparison across Awareness Groups

Table 5.7 shows measures of fit for a series of nested models which test the equality of model parameters across the two political awareness groups. Model I, the baseline model, fits the same model to both groups but places no between group equality constraints. The ensuing models impose a successively more restrictive set of constraints, culminating in model IX in which all parameters are fixed to equality across groups. The baseline model then, for each group, fixes the common and unique factor loadings, the variances of the common factors and covariance paths between common factors to be equal across waves. The error terms of the indicators are unconstrained across waves and no between group constraints are imposed.

As can be seen from Table 5.7, the first between group constraint, inter-group common factor loading invariance (model II), reduces the fit of the model relative to the baseline on every criterion. However, in each instance the loss of fit is very small and, given the greater parsimony of the factorial invariance model and the fact that the model fits the data well on adjusted fit criteria (CFI = 0.991; RMSEA = 0.036), this model can be accepted as a good representation of the observed data. The same is true of the next nested model (model III), in which the unique factor loadings are constrained to be the same across groups, although the fit relative to the baseline is somewhat better for this model, with the CFI and RMSEA remaining unchanged. Model IV combines these constraints on the common and unique factor loadings and still fits the data quite well (CFI = 0.991; RMSEA = 0.037).

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Model	Chi ²	df	CChi ²	Cdf	p	CFI	RMSEA	ECVI
I*	835	266				.992	.035	.627
II	877	271	42	5	0.000	.991	.036	.647
III	854	272	19	6	0.004	.992	.035	.632
IV	898	277	62	11	0.000	.991	.037	.692
V	926	284	90	18	0.000	.987	.044	.832
VI	1204	278	369	12	0.000	.990	.038	.721
VII	1198	278	363	12	0.000	.991	.036	.652
VIII	1206	279	371	13	0.000	.986	.044	.838
IX	994	295	159	29	0.000	.986	.044	.837

* Baseline model (each group) = invariant common & unique factor loadings across waves; invariant latent variance across waves; invariant inter-latent covariance paths.

I = baseline model - no between group constraints

II = common factor loadings invariant across groups

III = unique factor loadings invariant across groups

IV = common & unique factor loadings invariant across groups

V = error terms invariant across groups

VI = common, unique factor loadings and latent common variance invariant across groups

VII = common and unique factor loadings and inter-latent covariances invariant across groups

VIII = VI + invariant latent variances across groups

IX = All parameters equal across groups

Table 5.7 Nested Model Comparison BHPS Both Groups

This shows that, not only can this set of six items be said to measure the same 'thing' at each time of measurement but also that the meaning of the underlying construct is more or less the same in each group. Beyond this, however, imposing further between-group constraints, could not really be supported. Model V fixes the error terms of the indicators, Model VI the variances of the common factors and model VII imposes the constraint of equality across the covariance paths between common factors across groups. For all three sets of constraints, the fit indices show a substantial loss of fit relative to the baseline model. For example, constraining the covariance paths between latent common factors to equality across groups results in an increase in Chi Square of 301 for a gain of only one degree of freedom. Model IV was therefore selected as the model of best fit. Table 5.8 shows the variances of the latent factors and the covariances and correlations between each common factor for each group at each wave from model IV (equal common and unique factor loadings across waves and groups).

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Parameter	Aware	S.E.	C.R.	Uninterested	S.E.	C.R.
Covariance L1 - L2	0.62	0.06	11.2	0.12	0.01	11.2
Covariance L1 - L3	0.62	0.06	11.2	0.12	0.01	11.2
Covariance L2 - L3	0.62	0.06	11.2	0.12	0.01	11.2
Correlation L1 - L2	.95			.82		
Correlation L1 - L3	.95			.82		
Correlation L2 - L3	.95			.82		

Table 5.8 Variance and Covariances Sophisticated v Uninterested

The large between group differences in Table 5.8 are clear. Not only are the covariances between the latent common factors some five times greater for the more politically aware respondents but the correlations are also much larger in this group. There is, therefore, considerably greater longitudinal stability of this underlying value orientation in the politically aware group whether we use the standardised or unstandardised stability parameters. This is even the case, remember, when we have adopted weakened criteria for forming political awareness groups and corrected our stability estimates for measurement error. Over-time correlations of .95 between latent constructs indicate near perfect stability of the 'left-right' value dimension in the politically aware group over a period of five years. The corresponding figure of .82 for the uninterested respondents, while still of quite a high magnitude, is significantly lower ($p < 0.001$).

Table 5.9 shows the parameter estimates for each group from model IV. Again, all the factor loadings are close to 1, indicating that each item makes more or less the same contribution to the latent factor that it measures. The R^2 values of the observed items are significantly higher and the error terms significantly lower in the politically aware group - again implying that the left-right value dimension has a stronger effect in structuring responses to these items in this group. A more detailed and revealing analysis of the relative influence of the 'left-right' value across groups, however, can be obtained by decomposing the variance of each item as was done earlier in Table 5.3 for the whole sample.

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Variable	Common loading	S.E.	C.R.	Unique loading	S.E.	C.R.	error aware	error unaware	R ² aware	R ² unaware
<i>Wave 1</i>										
a	1			1			0.41	0.78	0.67	0.28
b	1.05	0.04	23.7	1			0.50	0.58	0.64	0.39
c	1.08	0.05	23.2	1			0.48	0.58	0.67	0.37
d	0.92	0.04	20.9	1			0.64	0.73	0.55	0.31
e	0.96	0.05	19.4	1			0.57	0.67	0.63	0.42
f	1.02	0.05	21.0	1			0.64	0.58	0.61	0.52
<i>Wave 2</i>										
a	1			1.08	0.10	10.9	0.39	0.47	0.70	0.43
b	1.05	0.04	23.7	0.96	0.08	12.3	0.32	0.40	0.75	0.49
c	1.08	0.05	23.2	1.09	0.10	11.4	0.36	0.42	0.75	0.48
d	0.92	0.04	20.9	1.04	0.11	9.5	0.66	0.54	0.56	0.40
e	0.96	0.05	19.4	1.10	0.06	19.0	0.38	0.46	0.75	0.55
f	1.02	0.05	21.0	1.06	0.06	17.4	0.30	0.36	0.78	0.65
<i>Wave 3</i>										
a	1			1.08	0.10	10.9	0.29	0.39	0.76	0.47
b	1.05	0.04	23.7	0.96	0.08	12.3	0.37	0.35	0.73	0.52
c	1.08	0.05	23.2	1.09	0.10	11.4	0.46	0.34	0.70	0.53
d	0.92	0.04	20.9	1.04	0.11	9.5	0.57	0.54	0.59	0.40
e	0.96	0.05	19.4	1.10	0.06	19.0	0.49	0.44	0.70	0.56
f	1.02	0.05	21.0	0.89 ⁵⁵	0.06	15.4	0.31	0.50	0.79	0.51

Table 5.9 Model Parameters – Between Group Comparison

Table 5.10 provides just such a breakdown. In addition to the consistently greater overall proportion of variance accounted for in each item by the two latent factors in the politically aware group (mean difference = 23%), two other interesting trends are also apparent in Table 5.10. First, the proportion of variance accounted for by the common factor is around three to four times greater in the politically aware group than in the uninterested group. Second, while the proportion of variance in each item attributable to the common factor is around three times the size of that attributable to the unique factor in the politically aware group, the proportions are almost equal in the uninterested group. Indeed, for the majority of items, the unique factor accounts for more variance in each item than the common factor does in this group of respondents. This would seem to confirm the hypothesis that the small amount of variance in each item accounted for by the common factor for the whole BHPS sample is due to the attenuating effect of less politically aware

⁵⁵ The parameters for the unique factor for this item were not constrained to be equal as when this constraint was applied the model was unidentified.

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respondents, who possess neither strongly held political attitudes nor a discernible 'left-right' value dimension.

variable	aware common factor	unaware common factor	aware unique factor	unaware unique factor	R ² aware	R ² unaware
<i>Wave 1</i>						
a	0.52	0.14	0.15	0.14	0.67	0.28
b	0.50	0.16	0.14	0.22	0.64	0.39
c	0.52	0.19	0.15	0.18	0.67	0.37
d	0.40	0.12	0.15	0.19	0.55	0.31
e	0.37	0.11	0.26	0.30	0.63	0.42
f	0.41	0.13	0.20	0.39	0.61	0.52
<i>Wave 2</i>						
a	0.52	0.18	0.18	0.24	0.70	0.43
b	0.59	0.21	0.16	0.28	0.75	0.49
c	0.56	0.22	0.19	0.26	0.75	0.48
d	0.40	0.14	0.16	0.26	0.56	0.40
e	0.41	0.13	0.34	0.43	0.75	0.55
f	0.51	0.15	0.28	0.51	0.78	0.65
<i>Wave 3</i>						
a	0.56	0.20	0.20	0.27	0.76	0.47
b	0.57	0.22	0.16	0.30	0.73	0.52
c	0.52	0.24	0.18	0.29	0.70	0.53
d	0.42	0.14	0.17	0.26	0.59	0.40
e	0.38	0.13	0.32	0.43	0.70	0.56
f	0.48	0.15	0.31	0.36	0.79	0.51

Table 5.10 Decomposition of Item Variance – Group Comparison

The results of this between group analysis then indicate that, not only do more politically aware respondents structure their responses to these six items in relation to a strongly held underlying value dimension but they are also extremely consistent and stable in the position they take on this dimension over time. The less politically aware respondents, on the other hand, are much less reliant on an overarching political value dimension but rather see each individual issue 'on its own merits' and as largely unrelated to the other five items. They are also significantly less consistent in their position on this dimension over time in comparison with the politically aware group, as is evinced by the lower covariances and correlations between latent common factors at each wave.

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5.6 Discussion

The initial aim of this chapter was to extend the cross-sectional analyses presented in chapters three and four to incorporate a longitudinal dimension in the assessment of belief system structure in the general public. This, however, proved impractical as, for the BGES data, the one factor model did not fit for the less politically aware respondents at wave one, while for the BHPS, although the one factor model held at wave one, sample attrition over subsequent waves led to a loss of fit for the one factor model over the three waves in this group too. This, in itself, is informative about the distribution of political sophistication within the general public as, even those individuals who are willing and able to participate in social surveys appear, in large numbers, to be characterised by weak, labile attitudes and a lack of hierarchical organisation in fragmented PBSs. As was stated earlier, due to differential unit and item nonresponse, we should interpret even these rather pessimistic estimates of the political sophistication of the general public as representing something of an upper bound.

This is not to say that the politically uninterested respondents were completely inconsistent in their responses to these items over time - the significant factor loadings, R^2 values and covariance paths indicate that there is a degree of stability in the responses of this group. However, this stability and consistency is still considerably less than that found amongst the more politically aware sample members and what stability there is, appears only weakly related to an underlying 'left-right' value dimension, being based more on the 'unique' characteristics of the items rather than those which are shared between them. This uniqueness is as likely to represent 'peripheral' aspects such as question wording and format as it is the actual subject matter of the item.

In addition to the insights this analysis has provided into the varying levels of attitudinal stability and constraint across levels of political awareness, an unexpected finding is worth considering at greater length. This is the

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consistent and quite substantial reduction in the error variances of the indicator variables and the consequent increase in the R^2 values for each item between wave one and waves two and three. For the whole sample, an average increase of 10% across items was observed between waves one and two but no further increase was apparent between waves two and three. This effect is argued to derive from the growing familiarity of respondents with the subject matter and format of questionnaire items over successive administrations and is akin to the 'Socratic effect' discussed by Jagodzinski et al (1987). While this effect has been noted in panels covering short time periods (e.g. two to three weeks), I am unaware of it having been reported when the lag between waves is as large as two years.

An interesting outcome of stratifying the analysis across levels of political awareness was that this effect appeared to be predominantly concentrated amongst those respondents who reported being uninterested in politics. For these respondents the average increase in R^2 across items between wave one and wave two was 12% (representing 31% growth) while for the politically aware respondents the corresponding figure was just 7% (representing an 11% growth). It is not unreasonable to extrapolate from this that a good deal of what little consistency we do observe amongst the less politically aware respondents is a function of participating in the survey *per se*. For the most politically aware respondents we are probably uncovering their pre-existing level of attitudinal consistency and belief system structure, while for the less politically aware, we are perhaps participating in its temporary construction.

In conjunction with the results of chapters three and four, a fairly comprehensive picture of the political sophistication of sections of the British public is beginning to emerge – a picture which is characterised by little or no attitude constraint and random switching between response alternatives over time. What primarily characterises this section of the electorate is their lack of interest, engagement in and knowledge of politics, which would seem to imply

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that the root of the problem is some sort of information or knowledge deficit. This interpretation is supported by the fact that familiarisation with the issues and survey procedures *per se* seems to improve people's performance on these criteria and that this effect is strongest amongst those who were less politically aware at the outset.

True, an actual score on a political knowledge measure was not one of the group formation criteria. However, as was pointed out in chapter three, this was because a knowledge score was not included on the BHPS and it was felt more important to replicate the analyses on independent samples than to have a knowledge score as the central stratification variable. Nonetheless, it is clear that the variables which were used to form the political awareness groups are very good proxies for political knowledge, as the mean score on the six item knowledge quiz that was included on the 1997 BGES was 5.2 in the politically aware group but only 3.1 in the uninterested group of respondents. As the knowledge quiz itself is unlikely to be a completely 'pure' measure of the underlying awareness construct, we can probably feel safe in assuming that the key characteristics differentiating these groups are their knowledge/awareness of and interest and engagement in politics. What the analyses presented so far all have in common, though, is that they rely on some pre-existing (and often self-reported) measure of political awareness as the basis for group comparisons. Apart from the tentative evidence relating to the 'Socratic' effect, there is nothing really causal or 'experimental' in the research design to enable us to have greater confidence that it really is knowledge or information *per se* that is the causal factor underlying the between group differences observed. In the next three chapters, different types of data and analytical techniques are used in an attempt to overcome these limitations and to look more causally at the relationship between political information and belief system structure.

6 THE PROPERTIES OF ATTITUDES UNDER INCREASING INFORMATION

In chapters three, four and five a range of measures were used to examine the difference between those engaged and those not engaged in politics in terms of the qualities and characteristics of their political attitudes. The findings, consistent with previous research in this area, established clear and consistent differences between political engagement groups in the extent to which attitudes are consistent with each other and stable over time. It was argued that the key factor underlying these differences was political knowledge or information; lack of information about political attitude objects gives rise to labile and ephemeral attitudes amongst the politically disengaged which, in turn, lead to low-level statistical associations between related items and between the same item over time.

The implicit assumption behind comparing groups low in political knowledge, interest and involvement therefore is that it is these factors that *cause* the observed differences in the quality and structure of attitudes and the systems they inhabit. In the remaining empirical chapters of the thesis, I turn to a more explicit consideration of the role of knowledge/information in determining these attitudinal properties. Two very different methodologies are used to assess the impact of information on the quality and direction of political attitudes and the findings of each method compared. It is hoped that by using two different methods to answer the same basic questions, more robust and general conclusions may be reached. In this chapter Confirmatory Factor Analysis is used on quasi-experimental data from a deliberative poll to investigate the impact of increases in information on the inter-relatedness or constraint of political attitudes.

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6.1 Information and Attitude Constraint

The common thread uniting the critiques of the nonattitude or 'minimalist' position reviewed in chapter two is that they all aim to rescue the contemporary public from charges of political ignorance by denying Converse's causal interpretation of the differences in correlation coefficients between attitude items across groups. For Converse, lower inter-item correlations amongst the less politically aware are essentially a result of the combined influence of two main characteristics of the belief systems of this group; the weak, uncognized 'nonattitudes' that underpin their responses to individual survey items *and* the lack of internal coherence in relation to higher order organising principle(s) in the belief system as a whole. But to take a further step back in the causal chain, if it is nonattitudes that lead to lower correlations, what is it that leads to nonattitudes?

A recent integration of theoretical perspectives on both attitudes and the survey response process provides a useful framework for understanding the ontology of the nonattitude construct and how it relates to statistical measures of constraint. Zaller and Feldman (1992, 1992) have proposed a 'Simple theory of the Survey Response' which sees attitudes, not as pre-formed cognitive entities waiting to be recovered from some mental filing cabinet and faithfully reported to the interviewer but as temporary constructions which are both time and context dependent. Their approach then is very similar to the 'measurement error' perspectives of Achen and Rose et al, although in important respects it differs, affording a neat integration of the nonattitude and measurement error camps (Bartle 2000).

For Zaller and Feldman the fundamental building blocks in the construction of 'revealed preferences' (as they term survey attitude responses) are 'considerations' and 'predispositions'. While the latter are in many respects akin to the notion of core beliefs and values, determining the favourability an individual will accord to a particular proposition or idea, the former are bits of

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information that, depending on their predispositions, will incline the individual to “decide a political issue one way or another” (Zaller 1992, p. 21). Zaller and Feldman delineate their theoretical framework with a set of axioms concerning the acquisition, retention and weighting of considerations to enable the derivation of testable hypotheses about survey responses:

The reception axiom: the more involved and engaged an individual is with politics, the more likely they are to acquire new considerations.

The resistance axiom: people resist incoming information that is inconsistent with their predispositions *but only to the extent that they possess sufficient considerations to perceive such inconsistencies.*

The accessibility axiom: the more accessible a consideration is in memory, the more easily it and related considerations will be retrieved. Accessibility itself depends on contextual factors and the recency with which considerations were in conscious memory.

The response axiom: survey responses are derived by averaging over accessible considerations.

These axioms allow certain clear deductions about how different people will respond to survey questions: people who are more interested and involved in politics will have a deeper pool of considerations on which to base their revealed preferences or attitudes. They will also, according to the resistance axiom, have less contradictory considerations because they will be better able to recognise information that conflicts with their predispositions and resist it. Finally, when they are called upon to provide an attitude response in a survey, they will be averaging over a larger pool of more consistent considerations than the less politically aware, which results in the same response alternative being selected more consistently over time. Thus, *the attitudes of the more*

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politically aware are more stable over time. Their attitudes are also more consistent with one another at any one point in time due to the combined influence of the reception and resistance axioms; they are more likely to seek out and obtain new information and, as their stock of relevant considerations grows, to resist information that conflicts with their predispositions. The net effect is a larger pool of consistent considerations, or in other words, *more constrained attitude systems*. Therefore, while constraint is usually considered as a sub-component of the broader concept of political sophistication, related to but distinct from the more straightforward and easily measurable aspect of sophistication – knowledge or ‘information holding’ (Delli Carpini and Keeter 1996) when considered from the Zaller and Feldman perspective, it can also be seen as their bi-product. Low levels of knowledge produces labile, situationally dependent responses which, in turn, produce lower correlations with other attitude items.

To further pursue this line of reasoning, how might we speculate on the effect of increases in (attitude relevant) information on correlational measures of constraint? To the extent that ‘nonattitudes’ are ‘top-of-the-head’ responses to uncognized stimulus objects, we might reasonably expect that increases in information about the stimulus object would lead to more considered, stable attitudes that have been arrived at through averaging over a deeper pool of more internally consistent considerations. In the aggregate, this should reduce the random variance in the respective survey item, disattenuating the level of statistical association with other attitude measures. We might also expect that, as knowledge of the political landscape grows, individuals obtain a better understanding of ‘what goes with what’ (and why) and that this too would feed through into stronger inter-item associations at the aggregate level.

While this is clearly the basic logic that underlies the many studies demonstrating strong association between measures of political knowledge or involvement and the magnitude of correlational measures of attitude

constraint, as an explicit hypothesis, it has rarely been put to the test experimentally. This, of course, is largely due to the high cost that collecting the data necessary to test the hypothesis would entail. The recent innovation of deliberative polling (Fishkin 1991, Fishkin 1995b) – while not explicitly designed for the purpose – does, however, provide an excellent research design for examining this question: what are the effects of increases in information on the internal consistency or constraint of Political Belief Systems?

6.2 Deliberative Polling

The concept of the Deliberative Poll has been developed in a series of books and papers by James Fishkin in collaboration with Robert Luskin, Norman Bradburn and other eminent political scientists and social researchers in the USA, Britain and Australia (Fishkin 1991, Fishkin 1988, Fishkin 1995b). Drawing on the nonattitude, fictitious issues and ‘Don’t know’ literatures, in conjunction with the widespread prevalence of political ignorance revealed through surveys, Fishkin argues that there are many reasons to question the validity and usefulness of the findings from traditional opinion polls. Because of the ill-thought out and unstable nature of responses to attitude surveys, he suggests that we should see the results of such exercises as merely ‘echoes’ – and weak ones at that – of elite discourse. The challenge for the deliberative poll, he argues, is to move beyond the provision of an echo-chamber to discover the real “voice of the people” (Fishkin 1995b, p. 16).

The basic design of a deliberative poll involves interviewing a randomly selected sample of the population on their views on a particular issue or range of issues before a representative sub-sample is asked to participate in a weekend of ‘balanced’ briefings by experts, discussion amongst poll participants and an opportunity to put questions to both academics and politicians. The sub-sample is then re-interviewed at the end of the weekend.

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Because a probability sample forms the basis of the study design, Fishkin has argued that this method of polling produces meaningful opinions which are representative of what the broader electorate *would think* were they better informed and motivated to think about political issues. In collaboration with Social and Community Planning Research (SCPR)⁵⁶ and Channel 4 Television, Fishkin has now conducted five deliberative polls in Britain on: crime (1994); European integration (1995); the monarchy (1996); political attitudes and party support (1997); and the National Health Service (1998).

Fishkin has argued that, in addition to being an interesting gauge of public opinion and a useful social scientific tool - deliberative polling could also be integrated into the political system to improve the quality of debate and to act as a locus of independent opinion leadership for the broader public. Specifically, he proposes that a deliberative poll would be a better way to launch presidential candidacies in the U.S. than the current primaries system and that its implementation would also be beneficial in a number of other electoral systems including general elections in the UK (Fishkin 1991, p. 6). This has caused some degree of controversy, with criticism centring on both the democratic implications of such a system and on the methodology of deliberative polling with particular emphasis on its claims to representativeness (Merkle 1996, Mitofsky 1996, Traugott 1992, Tringali 1996). Although there is some evidence that, due to unequal response propensities, certain groups are systematically under-represented in the post-survey results (Merkle 1996), generally the samples show a high degree of correspondence to the broader population from which they are drawn (Fishkin 1995a, Fishkin 1995b, Fishkin and Luskin 1996)

Given his emphasis on the utility of the deliberative poll as a component of the democratic process, the focus of Fishkin's own work has been primarily on

⁵⁶ Now the National Centre for Social Research.

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substantive results – in which direction opinion changes, by how much and for whom. A number of researchers have, however, questioned the wisdom of this emphasis, arguing that given the high degree of validity the method would need to obtain in order to achieve consensus for integration into the political system, it would be better, initially at least, to concentrate on the more social-scientific questions of how attitudes form and change. Meyer, for example, has suggested that, if the deliberative poll is having the effect on opinion that Fishkin argues it to, then in the ‘after’ measure of opinion, “there should be more internal consistency, less mushiness, more ideological constraint, and more ability to connect one issue with another” (Meyer 1996). It is this focus that is adopted in the present analysis.

6.3 Data

In collaboration with James Fishkin and Channel 4 Television, Social and Community Planning Research conducted a deliberative poll on political attitudes and party support on the weekend immediately prior to the 1997 UK General Election (April 26-28 1997). In January 1997, a nationally representative, stratified, multi-stage probability sample of 1210 individuals (response rate = 64%) was administered a short questionnaire covering political preferences, attitudes and demographic characteristics. All respondents were then invited to participate in a weekend of discussion and debate amongst the participants themselves as well as with politicians⁵⁷ and academic experts. Those attending the weekend were re-interviewed with the political attitude questionnaire at the end of the weekend of deliberation. This resulted in a ‘weekend sample’ of 276 individuals, 23% of the original interviewed sample. Comparisons between this sub-sample and the original

⁵⁷ Speakers included Kenneth Clarke (Conservative), Gordon Brown (Labour) and Malcom Bruce (Liberal Democrat).

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sample revealed no significant differences across a range of attitude, demographic and census variables (Fishkin 1995b).

6.4 Method

In chapter five a longitudinal factor model with six indicators over three waves was used to examine the differences in both the stability and constraint of the attitudes of the more and the less politically aware. It was argued that the observed differences in model parameters were a result of differences in the level of political awareness in the two groups. The aim of this chapter is to test this interpretation in a more experimental manner by fitting the same factor model to the before and after waves of a deliberative poll on political issues. Ideally the same six item left-right scale would be used but this was not possible as it was not included in both waves of data collection. Therefore a new scale, still measuring the same basic 'left-right' construct, was derived *ad hoc*. Four items covering attitudes toward: the balance between taxation and public spending; the introduction of a minimum wage; the level of taxation for the well off; and the importance of equalising incomes were used to measure position on the 'left-right' value dimension. Full wordings are presented below:

Wordings for 'Left-Right' Scale Items

Item 1 "How much do you agree or disagree that people earning around £50,000 a year or more should pay higher income tax than now?" response scale = 5 point Likert.

Item 2 "Where do you stand on making people's incomes more equal? Are you in the top box, agreeing completely with the statement alongside it (Government should try much harder to make incomes in Britain more equal)? Or in the bottom box, agreeing completely with that statement (Government should do nothing to make incomes in Britain more equal)? Or in one of the other boxes somewhere in between ? response scale = 7 point Likert.

Item 3 "Where do you stand on taxes and spending? Are you in the top box, agreeing completely with the statement alongside it (Government should spend a lot more on services like education, health, even if it means putting up taxes a lot)? Or in the bottom box, agreeing

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completely with that statement (Government should spend much less on services like education and health in order to cut taxes)? Or in one of the other boxes somewhere in between? response scale = 7 point Likert.

Item 4 “Where do you stand on the minimum wage? Are you in the top box, agreeing completely with the statement alongside it (Government should definitely introduce a minimum wage so that no employer can pay their workers too little)? Or in the bottom box, agreeing completely with that statement (Government should definitely not introduce a minimum wage because too many low paid workers would then lose their jobs)? Or in one of the other boxes somewhere in between? response scale = 7 point Likert.

The four items had an Alpha value of 0.69, significantly predicted support for the Labour and Conservative parties ($p < 0.001$) with coefficients in the expected directions and correlated 0.6 with a shortened five item version of the Heath et al ‘left-right’ scale which was asked at wave one only. By these criteria then, and in conjunction with the subject matter of the items, the scale would appear to function quite well as a measure of ‘left-right’ leanings, despite the conceptual coverage being somewhat skewed towards taxation and spending. Figure 6.1 shows the path diagram for the factor model. Four indicator items (rectangles) tapping the ‘left-right’ political value dimension (ellipses) were administered prior to and immediately after the polling weekend. The decomposition of item variance is again achieved according to equation 5.1 in chapter five. What we should expect to see if the ‘information intervention’ of the weekend of deliberation affects the inter-relatedness or constraint of these items is an increase in the total R squared of the items in wave two with this increase deriving predominantly from a growth in the explanatory power of the common factor.

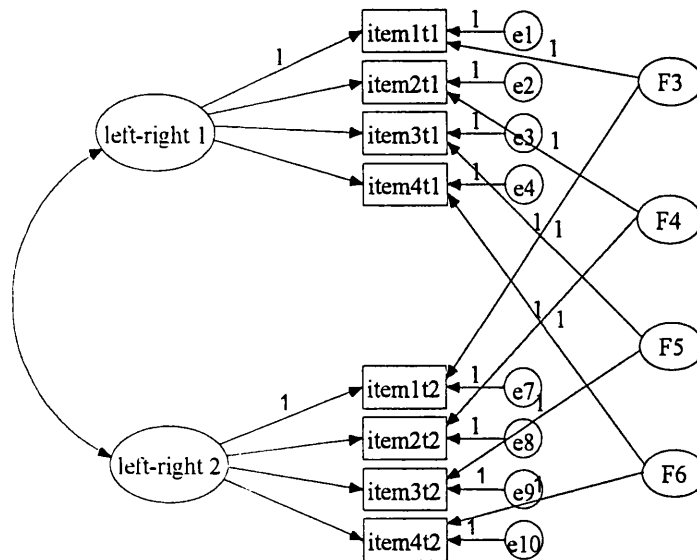


Figure 6.1 Path Diagram for Factor Model

6.5 Results

6.5.1 Model Selection for Whole Sample Analysis

The first step in the analysis was to evaluate the fit of the model shown in Figure 1 to the whole 'weekend sample' ($n = 276$). Table 6.1 shows a range of Goodness of Fit statistics for a series of nested models fitted to the whole sample data. The base model, which applies no constraints between parameters across waves, fits the data extremely well with a Chi Square value of 11.6 on 16 degrees of freedom ($p = 0.773$). The Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSEA) and Expected Cross Validation Index (ECVI) also support the close fit of this theoretical model to the observed data.

Apart from the variance of the common factor, applying equality constraints between parameters across waves causes a significant loss of fit across all measures; the factor loadings between the common factor and the error terms

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of the indicator items are significantly different at each measurement wave. That the unstandardised factor loadings are not invariant over such a short time period is unusual and implies that there has been a 'qualitative' shift in the meaning of the latent construct (McArdle and Nesselroade 1994). In chapter five we saw that a similar six item 'left-right' scale was factorially invariant over a five year period which is not at all uncommon for this type of latent attitude, suggesting that the way these items are perceived and understood to relate to one another has altered considerably over the polling weekend. The loss of fit caused by constraining the disturbance terms to equality across waves is due to the fact that in three of the four items the error variance is significantly lower in wave two.

Model	Chi ²	df	p	CChi ²	Cdf	p	CFI	RMSEA	ECVI
I	12	15	0.773	-	-	-	1.000	0.000	0.248
II	29	18	0.061	18	3	0.000	0.997	0.045	0.292
III	32	19	0.034	21	4	0.000	0.996	0.049	0.298
IV	12	16	0.760	0	1	0.651	1.000	0.000	0.249

I = no constraints

II = common factor loadings invariant across waves⁵⁸

III = error variances invariant across waves

IV = latent variances invariant across waves

Table 6.1 Nested Model Comparison for Whole Sample

6.5.2 Decomposition of Item Variance for Whole Sample

Table 6.2 shows the decomposition of item variance for the whole sample for the model of best fit - model V - which constrains only the variances of the common factors across waves. On average, the common factor accounts for about twice as much of the variance in the indicator items as the unique factor at both waves, although this average figure masks a good deal of variation

⁵⁸ Unique factor loadings are already constrained to equality as both are fixed at unity in order to scale of the latent variable. This is necessary when there are less than three indicators.

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across items; the unique factor having a stronger effect than the common factor on item 3 and the common factor explaining five times as much variance in item 2 than the unique factor. Together, the two latent factors account for around sixty percent of the variance in the observed items at each wave. The effect of the increase in information on the consistency between responses to these items appears to be negligible. There is an increase over the weekend of about five percent in the joint proportion of variance accounted for by the two latent factors which derives entirely from the increase in variance accounted for by the common factor.

<i>before</i>	α_{iT}	α^2_{iT}	β_{iU}	β^2_{iU}	Total R^2
item 1	0.64	0.41	0.38	0.14	0.55
item 2	0.71	0.50	0.33	0.11	0.61
item 3	0.49	0.24	0.60	0.36	0.60
item 4	0.60	0.36	0.41	0.17	0.53
mean		0.37		0.20	0.57
<i>after</i>					
item 1	0.71	0.50	0.40	0.16	0.66
item 2	0.66	0.43	0.41	0.17	0.60
item 3	0.36	0.13	0.56	0.32	0.45
item 4	0.77	0.59	0.41	0.17	0.76
mean		0.42		0.20	0.62

Table 6.2 Decomposition of Item Variance for Whole Sample

This increase in the explanatory power of the latent factors is especially small when compared to findings from similar models fitted to panels with no specific ‘information intervention’ between waves. Jagodzinski et al (1987), for example, find an average increase in total R^2 of 19%⁵⁹ between waves one and two on a four item scale measuring attitude toward guest workers in West Germany. In chapter five a 10% average increase was observed on the six items of the Heath et al ‘left-right’ scale between waves one and two of the British

⁵⁹ My own calculation from Table 3, page 292 (Jagodzinski *et al.* 1987).

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Household Panel Study – a gap of two years. Thus, while the results for the whole sample analysis indicate, very tentatively, that there may have been a slight increase in the degree of internal consistency of these items as a result of the information and deliberation, this average increase is very modest, even in comparison with increases commonly observed between the first waves of standard panel survey designs. There was, however, evidence from the change in the factor structure of the items, of a fundamental shift in the way that respondents saw these four items as relating to one another as a result of the increase in information over the weekend.

The next stage in the analysis involved splitting the sample by a measure of self-reported interest in politics to investigate the extent to which the findings from the model fitted to the whole sample are generalisable across levels of political awareness and involvement. It is not unreasonable to expect that growth in attitude constraint amongst the less politically informed is being masked at the aggregate level by the attenuating effect of the better informed who already exhibit considerable internal consistency of PBSs. Due to the small size of the total sample, however, the sensitivity with which awareness groups could be defined was rather limited.

Ideally, in order to maximise any effect of information on attitude constraint, it would not be necessary to use the whole sample but only those respondents at the extremes of the political awareness measures. Due to the sample size limitations, however, this was not possible and the whole sample was split into just two groups: those who reported having ‘a great deal’ or ‘quite a lot’ of interest in politics (n=143); and those who reported having ‘some’, ‘not very much’ or no interest ‘at all’ (n=127)⁶⁰. The effect of this limitation in stratification criteria is to underestimate the true heterogeneity in belief system constraint in the population. Employing a short knowledge measure (see

⁶⁰ Three respondents provided no response to this item and were omitted from the analysis.

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section 7.4.1 for a description of this scale) as the stratification variable provided essentially the same results as reported below, however, the interest measure was preferred for presentational purposes as the cut-off criteria for group formation made more intuitive sense.

6.5.3 *Decomposition of Item Variance Across Groups*

Table 6.3 shows the decomposition of item variance for the before and after waves of the deliberative poll for the two political interest groups. The model from which these estimates are taken constrains common and unique factor loadings to equality across groups but leaves the error terms of the indicators and variances of the latent variables free to vary. The error terms and latent variances were left unconstrained despite the fact that testing of nested models revealed no significant loss of fit (as assessed by the Chi Square difference test) when these latter constraints were imposed. The logic behind this decision was that, with relatively small *N*s in each group, only very large discrepancies in fit would be detectable with this test. Furthermore, previous analyses in chapter five, using the same basic model on larger datasets had shown significant loss of fit when constraining these parameters to equality across political awareness groups (see section 5.5). Given the unlikelihood of finding significant loss of fit with such a small sample *and* the lack of discrimination in the political involvement measure employed, it was thought better to fall back on both theory and findings from previous analyses to select the model of best fit for this analysis.

The first thing to notice about Table 6.3 is the greater total R^2 amongst the politically interested at both waves. The difference is not as large as was observed in the analyses in chapter five, although this is probably reflective of the use of the entire sample rather than just those respondents with the most and least stated interest in politics. The second clear difference between groups in Table 6.3 is the greater contribution of the common factor toward the total

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R² amongst the politically interested group. While, on average, both latent factors make a roughly equal contribution to the total item variance amongst the less politically interested, for the politically interested group the common factor has about twice the effect of the unique factor.

interested		common factor	common factor	Unique Factor	Unique Factor	Total Rsq
<i>before</i>		Loading	R sq.	Loading	R sq.	
	item 1	0.71	0.50	0.40	0.16	0.65
	item 2	0.75	0.57	0.33	0.11	0.68
	item 3	0.53	0.28	0.61	0.37	0.65
	item 4	0.64	0.41	0.37	0.14	0.54
mean			0.44		0.19	0.63
<i>after</i>						
	item 1	0.74	0.55	0.38	0.14	0.69
	item 2	0.71	0.51	0.38	0.15	0.66
	item 3	0.45	0.20	0.54	0.29	0.49
	item 4	0.87	0.76	0.34	0.12	0.88
mean			0.50		0.17	0.68
uninterest						
<i>before</i>						
	item 1	0.56	0.31	0.31	0.10	0.41
	item 2	0.65	0.42	0.34	0.12	0.53
	item 3	0.40	0.16	0.62	0.39	0.55
	item 4	0.53	0.28	0.47	0.22	0.50
mean			0.29		0.21	0.50
<i>after</i>						
	item 1	0.73	0.54	0.39	0.15	0.69
	item 2	0.49	0.24	0.49	0.24	0.48
	item 3	0.09**	0.01	0.64	0.41	0.41
	item 4	0.53	0.28	0.51	0.26	0.54
mean			0.27		0.26	0.53

** = non-significant (p < 0.05)

Table 6.3 Item Variance Across Political Involvement Groups

In terms of the effect of the increase in information over the polling weekend, the results of this analysis again indicate that the effect was negligible. The average increase in total R² was 5% amongst the politically interested and only 3% amongst the less interested. Counter to prior expectations, what little

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increase there was in R^2 caused by the common factor was confined entirely to the politically interested group of respondents for whom the common factor R^2 increased by 6%; the small average increase in total R^2 amongst the politically uninterested group actually masked a 2% decline in the common factor R^2 and an increase of 5% in the unique factor R^2 . Nonetheless, there does seem to have been one important difference across these groups in terms of the impact of the increase in information on the way that these issues are seen to group together. While both groups before the deliberative weekend saw each item as making a significant and roughly equal contribution to the variance of the latent common factor, this only remained the case after the information intervention for the politically interested respondents. For those in the uninterested group, item three – which concerns the balance between tax and spending – became non-significant, contributing next to nothing to the shared variance between items. This suggests that this group might have experienced a more fundamental reappraisal of these issues and how they relate to one another. As the main focus of the other three items is on equalising incomes, it may be the case that these items were seen more as a separate issue from the notion of the balance between taxation and public spending after they had deliberated on the issues.

From the perspective of the working hypothesis of this chapter, this result is somewhat contradictory. On the one hand it supports the idea that the effect of increases in information on the content and structure of belief systems will be greatest amongst the least well informed. On the other, however, it does not support the hypothesis that the actual effect of information will be to increase the extent to which issues are seen as inter-related. Rather than increasing the tendency to see all of these issues as relating to one, higher order value dimension such as 'left-right' or 'socialist-laissez-faire', the effect, if anything, appears to have been to compartmentalise them more narrowly.

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6.5.4 Stability Coefficients Across Political Awareness Groups

Finally, it is worth considering the correlations between latent common factors at each wave for the two political interest groups, as these are often taken as estimates of the longitudinal stability of the latent attitude. Amongst the politically interested respondents, the Pearson correlation coefficient was 0.95, while for the uninterested respondents, the coefficient was 0.75⁶¹. This indicates near perfect stability for the former group but a relatively high degree of instability for the latter (remembering the short time period over which measurements were taken and the correction for measurement error in the estimates). The interpretation of these stability coefficients, however, is complicated by the ‘information intervention’ between measurements. Normally, we could interpret lower correlations in a particular group as indicative of temporal instability due to random error in the items at each wave resulting from the greater prevalence of ‘nonattitudes’. This was the basis of Converse’s original ‘Black-and-White’ model. However, given the intervening increase in information from the deliberative poll, it may well be the case that there is merely more true change between time one and time two in the less interested group. Without additional waves of measurement, however, it is impossible to tell.

6.5.5 Sample Composition Effects

Before turning to a more general discussion of these results, it is worth conducting a couple of additional analyses to seek to explain empirically why the effect of a weekend’s discussion and deliberation on political matters had such a minor effect on the reliability of these items as measures of the underlying construct. Figure 6.2 shows the self-reported level of interest in

⁶¹ Constraining these parameters to equality resulted in a significant loss of model fit ($p < 0.001$).

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politics for the weekend sample ($n = 276$); the non-weekend sample⁶² ($n = 934$); and the 1997 British General Election Study ($n = 3093$). Perhaps unsurprisingly, the sample of people who made the trip to Manchester from all over Great Britain to spend the weekend deliberating about politics were significantly more interested in politics than those respondents who declined the invitation ($p < 0.001$). They are also significantly more interested in politics than the BGES sample which mirrors quite closely the 'non-weekend' deliberative poll sample. Comparisons of a short policy knowledge measure between these groups revealed that the 'weekend' sample were also more knowledgeable about politics ($p = 0.003$).

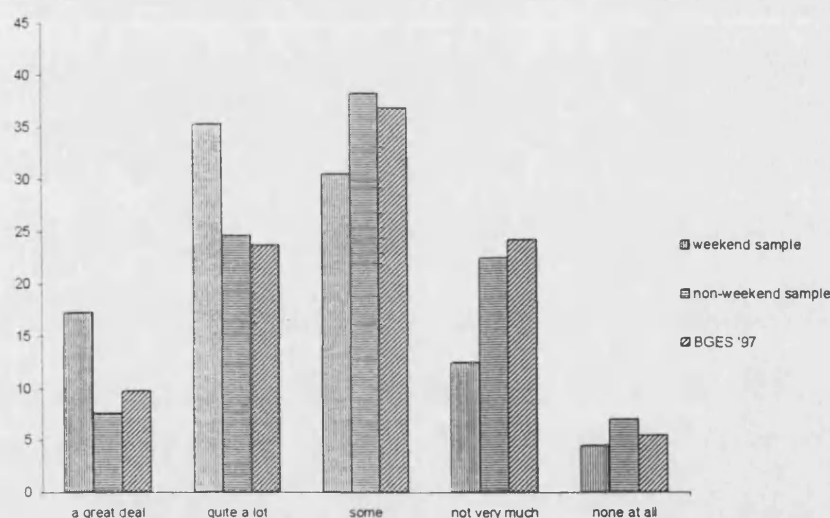


Figure 6.2 Interest in Politics Across Samples

Thus, as with quota sampling, that a deliberative poll sample matches the target population across a range of key demographic variables does not necessarily guarantee the representativeness of the sample across all survey

⁶² The non-weekend sample refers to those respondents who were interviewed in the first wave but did not come to the polling weekend and were not interviewed in the second wave.

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variables (Jowell, *et al.* 1993). However, although the weekend sample was considerably more interested in and knowledgeable about politics than the general population in the aggregate, there were still sufficient numbers of respondents reporting little or no interest, to enable an assessment of the effect of increases in information on this group. What additional explanation might there be then, for this lack of effect?

Figure 6.3 plots Cronbach's Alpha for each level of political interest for the 'weekend' sample, the 'non-weekend' sample and the 1997 BGES. Alpha essentially provides the equivalent of the Pearson correlation coefficient averaged across items, although it is affected in an upward direction with increasing number of items. As the same four items were not included on the BGES, the six item 'left-right' scale developed by Heath *et al.* (1993) was used instead.

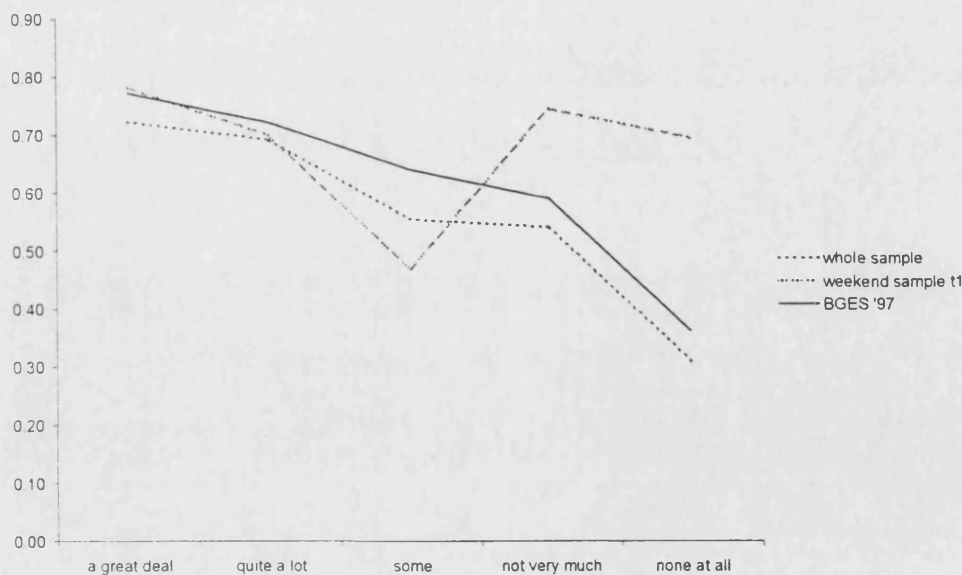


Figure 6.3 *Cronbach's Alpha by Political Interest*

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While the strong downward trend of coefficients with decreasing level of political interest is almost identical for the BGES and the 'non-weekend' sample⁶³, for the weekend sample the pattern is very different. For those respondents with 'a great deal' and 'quite a lot' of interest, the coefficients are very similar to those observed in the other two samples. After that though, the pattern diverges substantially; with those expressing 'some' interest having a considerably lower and those with 'not very much' and 'no interest at all' having much higher coefficients than the non-weekend and BGES samples. What this suggests is that, in addition to having a much greater interest in politics than the general population as a whole, those expressing little or no interest in politics amongst the weekend sample seem to be significantly different from those who express little or no interest in politics in the general population – at least in the extent to which their PBSs are constrained. Given the already high level of political interest and PBS constraint amongst the deliberative poll sample then, it is perhaps not quite so surprising that the observed increase in the reliabilities of these four political attitude items was so slight over the course of the weekend.

It should be pointed out that this analysis seems to somewhat contradict the results of Table 6.3, where the more interested respondents had higher mean R^2 values across the four items at wave one than the less interested respondents. This difference between the two analyses is due to the fact that the models for combining the items are different in each case – with scores weighted by factor loadings and correction made for measurement error in the CFA and a simple sum used in the coefficient Alpha analysis. Of the two, the Alpha should be considered the 'quicker and dirtier' with more confidence placed in the CFA results. The contradiction, however, should not be overstated because, by both measures, the difference between the two interest

⁶³ The slightly higher coefficient at every level of political interest on the BGES can be accounted for by the fact that the scale used six rather than four items.

groups is considerably less than has been reported in similar studies and the actual discrepancy in these findings is negligible in comparison⁶⁴.

6.6 Discussion

The aim of this chapter has been to exploit the unusual features of the deliberative polling methodology to explicitly test the hypothesis that the low internal cohesion commonly observed amongst the politically uninformed and uninvolved members of society are caused by a lack of information about the objects of their attitudes. This has been the implicit rationale underlying the many studies that have demonstrated a steep upward gradient in the magnitude of inter-item correlations with increasing political interest, involvement and knowledge. If this rationale is correct, we should expect to see increases in the magnitude of statistical associations between attitude items following a weekend in which political issues and preferences have been at the centre of debate. Additionally, any such increases should be disproportionately concentrated amongst those respondents with the lowest pre-existing levels of knowledge and awareness.

This hypothesis builds on both the body of cross-sectional work linking unconstrained political belief systems with low levels of political knowledge and involvement and previous research on the 'Socratic effect' which concluded that the statistical associations between related survey attitude items increase over the early waves of panel studies because "related or logically interdependent issues appear to stimulate respondents to reflect on the relations between their attitudes, opinions and behaviour" (Jagodsinski, *et al.* 1987, p.260). If this is the effect of simply being administered a

⁶⁴ Using the same factor model, Table 5.9 shows an average difference of over 50% on the items of the Heath et al 'left-right' scale at wave 1 of the BGES 1997.

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questionnaire, then the effects of attending a deliberative poll weekend should logically be at least as large if not substantially greater.

The results of the present analysis do not support this expectation; an average increase of only around 5% in the total R^2 of the four indicator items of a latent 'left-right' political attitude suggests a minimal growth in the internal consistency of these measures over the course of the weekend. The hypothesis that the effect of information would be greatest amongst the less politically informed members of the sample was only partially supported by the data – there was a more substantial shift in the relative contributions made by each item to the variance of the latent attitude amongst the less informed respondents, with one of the item factor loadings becoming non-significant in the 'post' survey. However, although the information effect was greatest amongst the less politically involved, the actual effect resulted in an overall *reduction* in the extent to which all of the scale items were seen to be inter-related. If anything then, the evidence suggested that the less informed respondents tended to view the issues more narrowly after the deliberative weekend rather than increasing their tendency to see all the items as pertaining to one, over-arching value dimension.

To be sure, the design of the study was not optimal and could be improved upon in a number of ways; larger sample size and more waves of data collection for a start. It would also have been desirable to test the robustness of these results on different attitude scales. However, this was not possible due to the content of the rather small pool of questions that were repeated at both waves and the findings are therefore open to the criticism that they may just be an artefact of the specific items considered. While addressing this question definitively would probably require additional data collection, we can perhaps have greater confidence in the generality of these findings by considering them in the context of the analyses presented in chapter five and the work on the Socratic effect by Jagodzinski et al (1987) which found average increases of

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10% and 19% respectively on similar scale items between waves one and two of standard panel studies that incorporated no 'information intervention'. While acknowledging the tentative nature of the conclusions that can be drawn from the results of this analysis then, it is nonetheless surprising that the effect was so minimal.

Two primary explanations were suggested for these largely 'null' findings, one mainly substantive and one more methodological in nature. In comparing nested models which imposed increasing numbers of constraints between parameters, it was found that the common factor loadings were not invariant across waves⁶⁵. This would normally be considered unusual for an attitude measured over such a brief interval, as one of the defining qualities of an attitude is its relatively stable or enduring nature (Eagly and Chaiken 1993). When the same basic factor model has been fitted to other political attitude panel studies, factorial invariance is often observed over much longer time periods. When longitudinal factorial invariance cannot be established, it suggests that the construct being measured has undergone a 'qualitative' change in meaning rather than just a quantitative shift in the direction or magnitude of preferences (McArdle and Nesselroade 1994). This qualitative change in the meaning of the latent factor seems to have been greatest amongst the less politically interested group of respondents, whose responses after the weekend of deliberation indicated that they had moved to a position in which they saw the issue of balancing taxation and spending and the issue of equalising incomes as *less* related than they had previously.

⁶⁵ Less strict tests, which only constrained some of the factor loadings to equality, also revealed significant loss of model fit.

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When such a qualitative change occurs, we can be far from certain that the 'thing' being measured at each wave is the same and comparisons between parameters across waves become much more difficult to make sense of. This then forms the basis of the substantive explanation; the effect of the increase in information was so great that, rather than reinforcing and 'firming up' the already existing attitude, a more fundamental change was engendered, rendering comparisons between the attitudes at each time point more or less meaningless. This is the same basic rationale that prevents the interpretation of the correlation between latent common factors as a simple measure of longitudinal stability. The issue can only be resolved by including further waves of measurement.

The methodological explanation is concerned with sample composition. Perhaps the main feature of deliberative polling which sets it apart from other deliberative methodologies such as 'citizens' juries', 'consensus conferences' and 'planning cells' is its probabilistic survey design and the consequent representativeness of the achieved sample. This allows conclusions drawn concerning the direction and magnitude of attitude change to be generalised to the broader public - 'this is what the public would think, were they better informed'. Claims about the representativeness of deliberative poll samples have, thus far, been based on the impressive closeness with which they match the general population across key demographic characteristics such as age, sex, education and social class. As with quota sampling, however, such equivalence does not guarantee representativeness across all survey variables.

In the current example, the level of self-rated interest in politics was significantly higher in the 'weekend' than in the 'non-weekend' sample, suggesting that the deliberative poll was biased in an upward direction in the extent of interest in and knowledge of politics. Furthermore, there was evidence that amongst those expressing little or no interest in politics in the 'weekend' sample, the level of belief system constraint - as assessed by

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Cronbach's Alpha – was already substantially higher before the deliberative poll than in equivalent groups in the 'non-weekend' sample and the 1997 BGES. Given these apparent biases in the composition of the 'weekend' poll sample, it is perhaps not so surprising that little evidence of an increase in attitude constraint was observed. As the baseline level of statistical association between the survey items under investigation was already so high, there was perhaps something of a 'ceiling effect' operating on the level of association that could be attained. Again, further research would be required to address this question definitively.

The results of this analysis then appear, perhaps, to provide more questions than answers in assessing the effect of increases in information on attitude stability and constraint. Certainly, there was no discernible growth in inter-item consistency after the weekend of deliberation, as simple extrapolations from previous research on attitude constraint and the 'Socratic effect' might lead us to expect. Given the question marks raised over both the representativeness and design of the deliberative poll sample for making this assessment, however, the lack of a strong information effect should be more appropriately viewed as an incentive to improve upon the research design than as evidence of the independence of information and attitude constraint.

7 SIMULATING THE ATTITUDES OF A BETTER INFORMED PUBLIC

In chapter six the effects of increases in political information on the internal consistency of PBSs was examined using data from a deliberative poll. It was hypothesised that the increase in information over the polling weekend would serve to augment inter-item associations through the dual processes of (a) reducing the attenuating effects of random measurement error by increasing the pool of considerations upon which preference judgements are based and (b) providing participants with a clearer and more explicit exposition of how different issues are seen to relate to one another. Results from the analyses in chapter six provided only very tentative support for these hypotheses, although it was argued that the failure to observe a significant increase in consistency between attitudes may have been due to non-representativeness of the sample; those attending the deliberative polling weekend were significantly more interested and knowledgeable about politics and exhibited much greater attitude constraint before the weekend of deliberation than commonly found on similar items amongst the general public.

In this chapter a different technique is used to address essentially the same question but with a slightly different emphasis and focus. While the analyses in chapter six were concerned with the direct effect of information on attitude constraint, in this chapter the focus switches to how increases in information affect positions taken on individual issues. Logistic regression models are used to simulate the opinions of a 'better informed' public in order to evaluate the effect of increases in information on the *direction* of expressed preferences at the aggregate level. Subsequently, I take an exploratory look at how changes in issue preference direction, engendered by increases in information, impact on statistical measures of attitude constraint. Through replicating models on

independent samples and using different measures of political knowledge to simulate a better informed public, evidence is also presented to support the general robustness and validity of the simulation methodology developed by Bartels (1996) and Delli-Carpini and Keeter (1996).

7.1 Information and Preference Direction

According to Zaller and Feldman's 'simple theory of the survey response', the better informed should provide more stable attitudinal responses and be less susceptible to persuasive communications (Zaller and Feldman 1992). At any point in time, with larger pools of relevant considerations, these individuals are more likely to derive an opinion which closely approximates the true 'average' of their considerations and less likely to encounter novel information that will actually make a difference to their expressed preference on a particular issue (see section 6.2 for a fuller account of the Zaller and Feldman model). The expressed opinions of the less informed, on the other hand, being based on a shallower pool of relevant, but often conflicting considerations, are more labile because sampling across a smaller number of considerations is less likely to produce an estimate close to the true average and because the weight of each new piece of information encountered is proportionately greater on the expressed attitude. This is why the opinions of the less politically aware are affected to a large degree by contextual cues and other factors seemingly unrelated to the issues addressed in survey questions (Schuman and Presser 1980, Schuman and Presser 1981). Given these two deductions from the Zaller and Feldman model, we might expect a better informed public to exhibit a significantly different distribution of opinion than that which is currently observed.

The lability in the attitudinal responses of the less well informed, however, relates only to attitude change at the level of the individual. The key conditions required for individual level change to translate into shifts in

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aggregate public opinion and vote choice are that (a) the background characteristics of the better informed be different from those of the less well-informed and (b) these same background characteristics be related to the position taken on the particular issue in question. So long as the social positions or demographic characteristics of the less informed are significantly different from those of the better informed then, to the extent that social position is related to issue preference direction, increases in information will lead to shifts in the direction of public opinion at both the individual and aggregate levels^{oo}.

This rationale is exactly analogous to the notion of nonresponse bias in survey estimates; when particular population sub-groups are under-represented in the achieved sample and when these sub-groups also differ significantly from the overall population on variables of interest, survey estimates of population parameters will be biased as a result (Groves and Couper 1998). Given both the strong empirical relationship historically accorded to an individual's social position and their political orientation *and* the fact that political awareness is strongly related to demographic characteristics such as sex, age, education and social class (Bartle 2000, Delli Carpini and Keeter 1996), we should expect that increases in information will sometimes lead to quite substantial shifts in the direction of aggregate public opinion. Were this shown to be the case, it would pose a strong challenge to those theorists who have sought to downplay the importance of an informed electorate, or who have argued that 'low-information rationality' and cognitive heuristics can achieve for the rationally ignorant voter what knowledge and rational choice does for the politically informed (Lupia *et al* 2000). Additionally, in this chapter, I examine how changes in preference direction predicted from these models impact on the

^{oo} Although, it should be noted, in certain cases perfect self-cancelling within the attitude change amongst the less well-informed could result in no aggregate level change; for bias to exist, the direction of change must be predominantly in one direction.

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associations *between* attitude items. Through first simulating the opinions that the public would hold were they better informed and comparing the inter-item correlations of these simulated opinions with those between the actually observed opinions, it will be possible to gain a further perspective on the relationship between political awareness, preference direction and belief system constraint.

7.3 Simulating a Better Informed Public

A number of authors have, in recent years, developed the use of regression based models to simulate the opinions of a 'better informed' public. The technique is essentially the same as that developed and still widely used within the field of labour market economics, by Mincer (1974) and Becker (1993). In the classic example, wage levels are regressed on to a broad range of theoretically related demographic characteristics (such as age, social class, qualifications, years in employment etc.) separately for men and women. The female data is then plugged back through the model estimated for men, allowing a comparison to be made at both the individual and the aggregate level between the score predicted in each model - the residual being equivalent to the discriminatory effect of being female in the labour market. The model has been extended to include other areas of employment discrimination as well as other dependent variables (Harkness 1996).

While this debt to econometricians is not explicitly acknowledged, the same basic technique has been adapted to the area of attitude research within the field of political science. Both Bartels (1996) and Delli-Carpini and Keeter (1996) simultaneously but independently developed variations on the technique in order to investigate the effect of knowledge/information on political attitudes and vote choice in presidential elections. While regression models have long been used to assess which factors are associated with opinion holding and political orientation, the key difference with this type of

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model is that it uses the estimated parameters to extrapolate an actual prediction of what opinions people would hold were they better informed. Thus for example, we can say not only that more political knowledge is associated with a tendency to endorse fiscal conservatism but that X% of the public would support conservative fiscal policies were they as well-informed politically as the currently best informed members of society. While this is, of course, only a simple extension of the basic logic of regression modeling, it is one that is rarely made in the field of political attitude research and it lends a readier and more immediately intelligible interpretation than reference to a whole set of metric or standardised regression weights, often with opposite signs.

Delli-Carpini and Keeter (1996) use OLS regression and a specially designed political knowledge scale to look at the effects of political information on attitudes toward domestic issues; abortion; race; homosexual rights; and general social issues. Multi-item scales for each attitude were factor analysed and the factor scores used as the dependent variables in regression models employing a range of background characteristics such as age, class, education, marital status, religiosity etc. as the independent variables. Political knowledge, measured on a 28-item scale, was also included as an independent variable as well as the interaction of this knowledge score with all the other independent variables. Using the estimates from this model, they plugged the entire sample back through the equation, changing their scores first to the highest score on the knowledge scale (28) and then to the lowest score on the scale (0). Taking the mean predicted score for each model yielded the estimated attitudinal position for fully and completely uninformed publics respectively. This, they argue answers the question "Given how various personal characteristics influence opinions, what opinion would this person have if he or she had scored zero (or 28) on political knowledge?" (Delli Carpini and Keeter 1996, p. 396).

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They contend that their results generally support the notion that knowledge serves to facilitate a stronger linkage between individual and group interests and political attitudes. For example, within the group of people who had never had any financial troubles, they found that the effect of greater knowledge (controlling for all other variables in the model) was to reduce support for government social welfare, while for those who had experienced six or more financial problems, the effect of greater knowledge was to increase support for this type of programme. Likewise, full knowledge increased support for 'positive discrimination' policies amongst both blacks and non-blacks, although the effect was more pronounced in the former group.

These analyses provide a useful insight into the dynamics of political information and opinionation and lend strong support to the contention that people's attitudes - as expressed in surveys - cannot be considered as equivalent to those they would hold were they better informed about politics. However, the use of OLS regression and standardised factor scores limits their usefulness in several ways. First, the assumption of linearity in the model is an over-simplifying one that is probably unjustified in this instance (Zaller 1992). Second, the predicted scores from linear regression models have unusual distributional properties which can often result in 'out of range', or 'nonsense' predictions (say, a predicted value of 8.2 when the actual scale ranges between 1 and 7). Finally the use of standardised factor scores as the dependent variables means that it is hard to meaningfully interpret the change scores because the metric is standard deviation units of a standardised factor score.

Bartels (1996) and Althaus (1998) overcome some of these problems by using non-linear regression on individual items rather than scale scores. Bartels uses a probit model and an interviewer rating of respondent political knowledge to estimate what the percentage vote distribution would have been in the last six U.S. presidential elections, had the public been better informed. He found that, on average, individual's actual vote probabilities were around ten percent

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different from those predicted in the fully informed model, although the size of this effect was somewhat diminished at the aggregate level through self-cancelling. While the effect of full information was never so large as to reverse an actual election result, it was nevertheless found that, on average, incumbent presidents did almost five percentage points better, in terms of share of the vote, than the fully informed model predicted they would and that Democrat candidates did around two percent better than they would have done were the electorate better informed.

Althaus (1998) uses binary logistic regression across a broad range of political attitude items from the 1988 and 1992 National Election Studies and the knowledge scale developed by Delli-Carpini and Keeter (1996, 1993). He too found significant information effects across the majority of items surveyed, with the general pattern of results fitting quite closely with previous findings from research into the impact of knowledge on political attitudes. Generally, he found that attitudes tended to become more progressive on social issues, more 'leftist' on fiscal policy and more conservative on the 'size and role of government' (i.e. favouring smaller role for government).

7.4 Method

The analytic approach adopted in this chapter follows that taken by the authors reviewed in the section above. First, a base model is fitted with just demographic variables as main effects, then a second model is fitted which adds 'information level' as an additional main effect and the interaction of this variable with all other main effects. The difference between the -2 Log Likelihood ratios for these two nested models can then be used to test for the significance of the effect of information in predicting the attitudinal dependent variable over and above the combined effects of the demographic covariates (Althaus 1998). Once the 'baseline' information effects model has been estimated, two additional models are fitted by (1) changing all respondents'

scores to the highest possible value on the information index and (2) changing all respondents' scores to the lowest possible value on the information index and running these new modified data sets back through the initial model⁶⁷.

$$P(Y=1) = \alpha + \beta_1 I_i + \sum \beta_k D_{ik} + \sum \delta_k (I_i * D_{ik}) + e_i \quad (7.1)$$

Equation 7.1 shows the logistic regression equation for the simulation model used in the current analysis, where Y is a binary dichotomous variable indicating respondent endorsement of an attitudinal proposition; I is respondent's level of political information; D_{ik} is respondent i 's score on the k^{th} demographic variable; $I_i * D_{ik}$ is the interaction of respondent i 's level of political information with their score on the k^{th} demographic variable; and e_i is the error of prediction. β_1 , β_k , and δ_k are the regression coefficients for the information and demographic main effects and the interaction terms respectively.

The demographic covariates used in these analyses are very similar, although slightly less numerous than those used in the Bartels, Delli-Carpini and Keeter and Althaus papers. These were: whether respondent pays attention to political news; member of trade union or staff association; has no

⁶⁷ Technically, this can be easily achieved in SPSS by 'stitching' the same file on top of itself so that each case is represented three times in the same 'stacked' data set. Each case will be identical apart from the information score which will be the actual score for the first case, the highest score for the second case and the lowest score for the third case. Using the 'select' sub-command within binary logistic regression allows the model to be estimated using just those cases containing the actual knowledge scores, although predicted scores are calculated for all cases from the estimated baseline model parameters.

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qualifications; Church of England; owns own home; on low income; age; and sex. All variables, apart from age, were coded to binary dichotomies, with '1' indicating category membership⁶⁸. The reason only these more or less fixed characteristics of respondents were selected as covariates was because (a) they reflect social stratifications which have traditionally differentiated political opinion (b) attitudinal or partisanship indicators, while improving the overall fit of the model, are themselves at least partially determined by information level so including them would serve to underestimate the true knowledge effect (Althaus 1998, Bartels 1996) and (c) it enabled models to be replicated on two independent samples in order to test the robustness of the estimates.

This latter point is particularly important, for, as Bartels notes, if the use of this type of 'information effects' model is to be successfully developed, "much additional work will be required to ascertain how robust the results are to different specifications of information effects, and how they compare to parallel results generated in other political settings" (Bartels 1996, p. 220). For this reason, as well as extending this type of modeling to the British public for the first time, I also replicate all models fitted on two independent samples – the 1992 and 1997 British General Election Studies (BGES). This meant that the choice of main effects covariates (and dependent variables) was limited to those that appeared in both surveys. The effect of this is likely to be a less powerful base model than could be achieved if only one sample were being analysed and a possible over-estimation of information effects. However, despite these caveats, the two sample approach to assessing reliability is nevertheless warranted in this instance. This is because the interaction terms in the model are highly co-linear with their corresponding main effects which, in conjunction with the non-zero correlations between main effects, means the standard errors of the metric coefficients are biased in an upward direction – making the standard significance tests of individual parameters such as t ratios

⁶⁸ i.e. code 1 for church of England indicates respondent is of that denomination.

and the Wald test too conservative. Replicating the same model on two independent samples therefore provides a more realistic idea of the robustness of the simulated estimates than simple tests of the 'nil hypothesis' with inflated standard errors (Cohen 1994).

7.4.1 Information Measures

In addition to testing the same models on independent samples, I use two rather different measures of political knowledge to assess the robustness of conclusions drawn about the relationship between political knowledge and attitudes. It is important to know, for example, whether different types of political knowledge have differential effects on different areas of political opinion. It may be the case, say, that knowledge about party policy stances has a significant impact on the individual's own policy preferences while knowledge about government institutions and constitutional debates has little impact. Section 2.7.4 discussed work on the different dimensions of political knowledge and how such schema have been operationalised into standardised survey instruments. In the following analyses two measures of knowledge are used which speak to the major dimensions of 'what government is' and 'what government does' (Delli Carpini and Keeter 1996). The third dimension that Delli-Carpini and Keeter discuss - 'who government is' is, unfortunately, not covered by any of the questions included in the BGES.

For the 'what government is' dimension, the knowledge scale developed by Martin et al (1993) which uses responses to six 'true/false' items to assess knowledge about the British electoral and government systems was used⁶⁹. Full wordings for these items are shown below.

⁶⁹ A ten item version of this scale was used in the 1997 survey but because only six items were used in 1992, only this subset was used in both analyses for the sake of comparability.

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Item Wordings for the Political Knowledge Scale

1. The number of MPs in Parliament is about 100.
2. The longest time allowed between elections is four years.
3. Britain's electoral system is based on proportional representation.
4. MPs from different parties are on parliamentary committees.
5. Britain has separate elections for the European and the British Parliament.
6. No one may stand for parliament unless they pay a deposit.

For the second dimension, 'what government does', a scale was created *ad hoc*. This involved scoring responses to policy placement items such that a 'correct' response was recorded when the Conservatives were placed to the right of both the Labour party and the Liberal Democrats on the five issues employed. The placement task involved asking respondents where, on a 12 point agree-disagree scale, they would place themselves and the three major parties. For example, a correct score of 1 would only be coded if a respondent gave the Conservatives a higher score than both the Labour party and the Liberal Democrats on a scale indicating support for the minimum wage, with higher scores indicating opposition and lower scores support for the policy. Five policy areas were covered by these scale questions: keeping prices down v keeping people in work; the balance between taxation and spending; favouring privatised or nationalised industry; importance placed on equalising incomes; and attitude toward European integration. Scores on the placement score therefore ranged between zero and five.

There is clearly some degree of ambiguity concerning the idea of 'correct' placement of parties along an abstract representation of a policy dimension. However, in addition to the idea of taking the 'elite' consensus⁷⁰ on where

⁷⁰ I am here relying on my own knowledge of elite opinion rather than directly sampling from some specified group such as MPs or political scientists.

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parties stand as the criterion for determining a 'correct' response (i.e. the Conservatives are to the right of Labour and the Liberal Democrats on the minimum wage), it is also possible to use the consensus within the general public. This means taking the population mean placements of the parties as the 'correct' placement. Either way, the ordering of parties along the policy dimensions is the same. Full wordings and scoring details for this scale are included in Appendix A. While the first scale, then, speaks to respondent knowledge about the institutional structures and constitutional arrangements of British political life, the second addresses the extent to which respondents are aware of where different parties stand, relative to one another, on some of the major issues of the day.

7.4.2 Dependent Variables

The dependent variables used in the analyses were also limited by the requirement that each model be replicated in both the 1992 and 1997 election studies. A trawl through both questionnaires identified seventeen items that were included in both surveys and had some policy relevance. These were the six items of the 'left-right' scale, the six items of the 'libertarian-authoritarian' scale, plus three additional items on: attitude toward defence spending; attitude toward schools competing for pupils; and attitude toward maintaining order in the nation. Additionally, the summed scales for the 'left-right' and 'libertarian-authoritarian' items were used. All dependent variables were recoded to '0' and '1', with '1' indicating either agreement or disagreement with the proposition stated in the item. For the summed scales, a median split was performed such that all those scoring higher than the median were coded '1' and all those scoring lower than the median '0'. Wordings for all seventeen items are provided in Appendix A.

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7.5 Data

The data for these analyses come from the 1992 (n=3534) and 1997 (n=3615) British General Election Studies (BGES). The surveys were conducted by the National Centre for Social Research and use a multistage stratified cluster design covering all of Great Britain. There is a face-to-face interview followed by a short self-completion questionnaire with one randomly selected adult aged 18+ in each selected household. Interview topics include: media exposure; party preference; party and leader images; political trust; class identity/constitutional issues; and political attitudes and values (see Heath (1993) and Evans (1999) for Technical Details).

7.6 Results

7.6.1 *Distributions of Knowledge Scores 1992 and 1997*

Figures 7.1 and 7.2 show the whole sample distributions for the two knowledge scores in both 1992 and 1997. The 'what government is' scale is referred to throughout the rest of this chapter as the 'quiz' score, while the 'what government does' scale is referred to as the 'placement' score. While there is a very small increase in the means of both knowledge scores between 1992 and 1997, the two measures are both very stable across the two surveys in terms of their univariate distributions, despite a five year gap in data collection. This supports previous research in the U.S. showing very high levels of longitudinal stability in political knowledge (Delli-Carpini, 1986; Bennett, 1988).

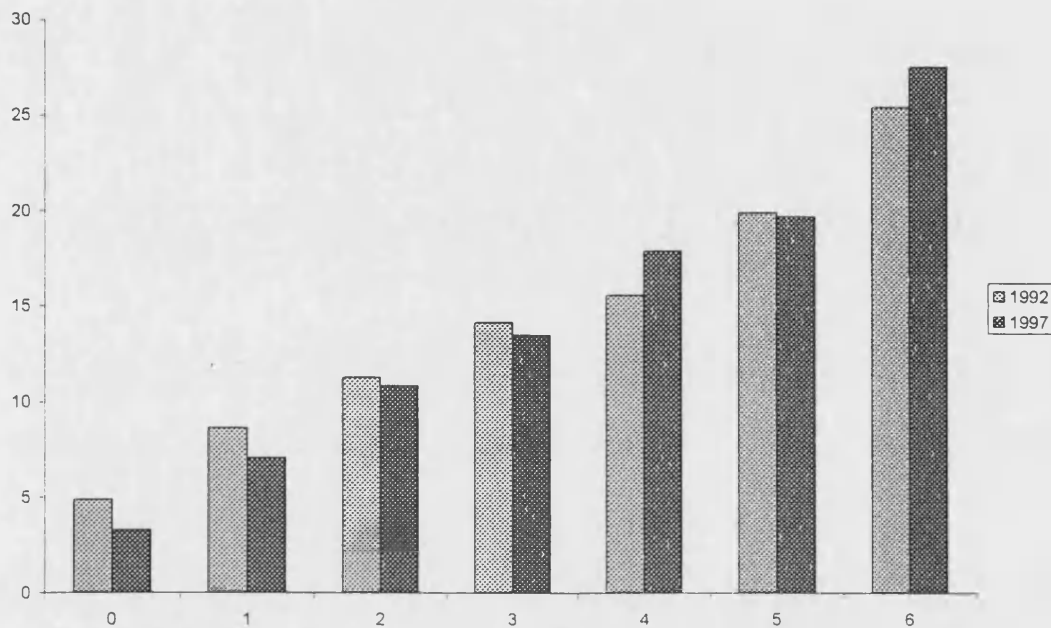


Figure 7.1 Percent Correct - Quiz Score

The 'placement' score seems to be slightly more difficult than the quiz score, to the extent that the percentage of people scoring zero or one is higher and the percentage scoring full or next-to-full marks is lower. The Pearson correlations of 0.43 ($p < 0.001$) between measures are identical in both years, the mid-range correlation suggesting that they both relate to the same underlying concept of general political knowledge but are, nonetheless, independent.

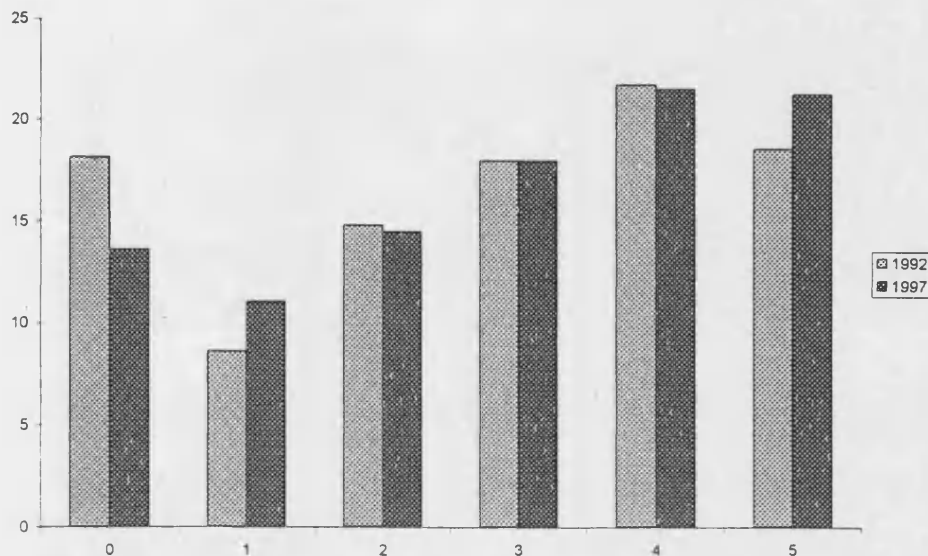


Figure 7.2 Percent Correct - Placement Score

Table 7.1 shows, for the models fitted using the placement score, the -2 Log likelihood for the 'base' model (just demographic main effects), the -2 Log likelihood for the 'information effects' model (demographic main effects plus information main effect and interactions of information with other main effects), the difference between these two and the p value on 9 degrees of freedom⁷¹. Also presented in Table 7.1 is Nagelkerke's pseudo R square which gives a rough estimate of the fit of the 'information effects' model⁷². Models in which a significant information effect was observed are highlighted by bold and italics. Across the seventeen attitude items examined in Table 7.1 eleven models showed that information level had a significant impact on position taken on the item. Testing models that included more covariates (and hence were not comparable across samples), led to greater explanatory power of the

⁷¹ Degrees of Freedom for -2 Log Likelihood difference test = df model 1 - df model 2.

⁷² Nagelkerke's pseudo R square ranges between 0 and 1 and is argued to approximate R square in linear regression - 1 indicating 100% of variation in probability of being in category 1 of the dependent variable explained.

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models but essentially the same pattern of results was found in terms of information effects (data not shown).

Dependent ⁷³	start L-R	end L-R	L-R diff.	df	p	Pseudo R ²
<i>defence</i>	2317	2286	31	9	.0003	.07
<i>left wing</i>	2170	2149	21	9	.0114	.10
<i>authoritarian</i>	1984	1961	23	9	.0072	.19
<i>order</i>	2168	2151	17	9	.0512	.06
schools compete	1795	1791	4	9	.9068	.04
<i>fair share</i>	2158	2131	26	9	.0020	.08
one law for rich	2113	2104	9	9	.4866	.08
<i>trade unions</i>	2161	2132	29	9	.0008	.10
private enterprise	1916	1901	15	9	.0996	.10
<i>public services</i>	2161	2096	65	9	.0000	.09
<i>gov. responsibility</i>	2126	2105	21	9	.0130	.11
young people	1456	1442	15	9	.3179	.08
<i>censorship</i>	1329	1298	30	9	.0001	.17
<i>public meetings</i>	2095	2049	45	9	.0000	.09
<i>homosexuals</i>	1989	1935	53	9	.0010	.13
totalitarian	2232	2210	22	9	.0790	.03
democracy	1570	1550	19	9	.3715	.04

bold, italics = significant (p < 0.05)

Table 7.1 Significance of Information Effects, Placement score 1992

For the quiz score in 1992, thirteen of the seventeen models showed significant information effects (Table A.1, Appendix A), while in 1997 the figure was sixteen for both the placement score (Table A.2, Appendix A) and the quiz score (Table A.3, Appendix A). Comparing these tables shows that the overall pattern in terms of information effects was more or less the same across years and knowledge measures, with the item 'one law for the rich' being non-significant across all four variants of the model, and 'young people' and 'schools compete' across three. In total, of the 68 models fitted, 54 (80%) revealed a significant effect of information on the direction of opinion ($p < 0.05$).

⁷³ See Table A.4 in Appendix A for a fuller explanation of the meaning and coding of these variables.

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7.6.3 Comparing Model Estimates across Independent Samples

Table 7.2 shows parameter estimates for identical models fitted to the 1992 and 1997 data. These are the models predicting the importance of maintaining order in the nation. It is interesting to note the similarity of the estimates in each model, despite the five year gap between surveys. Of the 18 parameter estimates in the 1997 model, 14 fall within the standard errors of the 1992 estimate and for the 1992 model, all parameter estimates fall within the 1997 standard errors. This lends support to the reliability of these estimates, despite the relative paucity reaching traditional statistical significance ($P < 0.05$).

1992 authoritarian (n=1774)			1997 authoritarian (n=3498)	
Variable	logit	s.e.	logit	s.e.
place2a	-0.1778	0.1180	-0.0891	0.0902
polnews	-0.2094	0.3341	-0.1340	0.2562
union	-0.3062	0.2633	0.1370	0.2150
noquals	0.2574	0.2475	-0.0592	0.2007
cofe	0.1602	0.2327	0.1971	0.1898
ownhme	0.0736	0.2385	0.0721	0.1992
lowinc	-0.6713	0.3017	-0.6320	0.2145
age	0.0432	0.0072	0.0488	0.0059
female	-0.1035	0.2234	-0.1150	0.1765
intpolnews	0.1285	0.1110	0.0493	0.0982
intunion	0.0267	0.0758	-0.0777	0.0595
intnoquals	0.0420	0.0804	0.1570	0.0628
intcofe	0.0637	0.0703	0.0317	0.0548
intownhme	0.0128	0.0771	0.0484	0.0614
intlowinc	0.1818	0.1003	0.1361	0.0658
ingage	-0.0012	0.0022	-0.0037	0.0017
intfemale	0.0156	0.0665	0.0015	0.0503
constant	-1.2962	0.3777	-1.4728	0.3016

bold, italics = significant ($p < 0.05$)

Table 7.2 Parameter Estimates Placement Score 1992 and 1997

As was argued earlier, the multicollinearity between predictors is likely to inflate standard errors, making traditional test criteria too conservative. This

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comparison then allows us to have greater confidence in the predictions of opinion change presented in the following tables⁷⁴.

7.6.4 Predicted Information Effects 1992

Table 7.3 shows the predicted scores using both information measures on the 1992 data, for each of the seventeen dependent variables as well as the difference between the predicted score in a public with no information and a public with full information.

Variable	Placement score				Quiz score			
	Baseline	None	Full	Diff	Baseline	None	Full	Diff
<i>defence</i>	41	31	48	17	41	31	46	15
<i>left wing</i>	47	43	53	10	47	54	46	-8
<i>libertarian</i>	55	63	49	14	55	65	52	14
<i>order</i>	41	36	47	11	41	29	48	19
schools compete	25	23	26	3	25	18	28	10
<i>fair share</i>	56	51	61	9	56	57	57	1
one law for rich	61	59	63	4	61	64	59	-6
<i>trade unions</i>	52	43	60	17	52	42	58	16
private ent	31	27	36	8	31	31	33	2
<i>public services</i>	40	28	53	25	40	31	47	16
<i>gov. respons.</i>	55	61	53	-8	55	78	46	-32
young people	18	14	20	6	18	12	21	8
<i>censorship</i>	16	11	21	10	16	11	20	9
<i>public meetings</i>	62	48	71	23	62	43	69	25
<i>homosexuals</i>	35	28	42	14	35	21	44	23
tolerance	51	48	54	6	51	45	55	11
democracy	19	17	20	4	19	12	23	11

bold, italics = significant (p < 0.05)

Table 7.3 Knowledge Effects 1992

⁷⁴ Not all models are as similar across years as these two. However, this is as much a function of changing marginals as it is unreliability of estimates. Because the logit coefficients are meaningful relative to the base odds, if the marginal frequencies of the dependent variables changes over years, the coefficients will no longer mean the same thing. For this reason, a model was selected for presentation in which the marginal frequency had not changed.

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The scores are the mean of the predicted probabilities for each model and so, because the predicted probability of the baseline model is the same as the actual marginal frequency, can be interpreted simply as representing what the public actually thinks on the issue and what it would think with both full and no information (Althaus, 1998). Looking across items, the general direction of information effects was for opinion to become more 'leftist' on economic issues and more libertarian on areas of social policy. For example, simulating a better informed public with the placement score increased support for the proposition that 'major public services and industries ought to be in state ownership' from 40% to 53% and from 62% to 71% for the proposition that 'people should be allowed to organise public meetings to protest against the government'.

This trend is also demonstrated by the fact that, when the summed scales were used as dependent variables, people were more likely to be on the left and more likely to take a libertarian perspective on social issues with full knowledge. The only item to reverse this trend was that pertaining to the government's responsibility to provide 'jobs for all' which, on both measures, obtained less support with full information. The effect was more uniform for the 'libertarian-authoritarian' scale items with both information measures showing opinion becoming more libertarian across all six items, although some of these effects did not reach statistical significance ($p < 0.05$). Of the 'non-scale' items, the one relating to foreign policy moved in a 'dovish' direction - support for reducing defence spending increased with more information, while support for schools competing for pupils and prioritising 'order in the nation' as a key policy aim, both increased with full information.

The two different measures of knowledge gave generally the same pattern of results, with the Spearman Rank correlations⁷⁵ between predicted change scores across the seventeen models being 0.72 ($p < 0.01$) for the two information measures⁷⁶. However, on particular items, the choice of knowledge measure led to different magnitudes and even directions of effect. For example, with the summed 'left-right' scale as a dependent variable, using the placement score predicted increased support for leftist policies while using the quiz score actually led to a decline in left-wing support⁷⁷. These aggregate changes mask a good deal of variability at the individual and sub-group levels. This is because the inclusion of interaction terms means that, within different sub-groups defined by the model, it is possible for the direction of information effects on the dependent variable to go in different directions. For example, in the model with 'working people in this country get a fair share of the nation's wealth' as the dependent variable the effect of full information was to increase support for this proposition by 14% amongst those people who belong to trade unions or staff associations but to reduce support for it by 5% amongst those people with no interest in political news on tv. Therefore, the effect of increased information on attitude direction is not uniform but depends on one's pre-existing reasons for either supporting or opposing a particular policy. There is, then, a good deal of self-cancelling occurring at the population aggregate level, which masks the true extent of individual level change with differing information levels. Despite this, however, the mean aggregate

⁷⁵ This non-parametric statistic was used due to the small number of observations. However, using the Pearson correlation coefficient yielded almost identical results.

⁷⁶ The difference scores presented in Table 6.3 represent the difference between the 'no information' and 'full information' publics. Using the difference between actual opinion and full opinion gives exactly the same pattern but smaller magnitudes. Correlations between difference scores over years and between measures are also largely unaffected by this choice.

⁷⁷ The effect for the quiz score did not reach statistical significance, although the same 'cross-over' effect was observed with the 1997 data where both effects were significant.

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difference across items between a better informed and a less informed public was 11% for the placement score and 12% for the knowledge quiz in 1992.

7.6.5 Predicted Information Effects 1997

Table 7.4 shows the predicted change scores for exactly the same models fitted to the 1997 BGES data. The pattern of results is very similar to that reported for the 1992 data, with opinion becoming more left wing on economic issues and more libertarian on social issues on both the placement score and the knowledge quiz. The estimates of change for the same items across years correlate at 0.74 ($p < 0.01$). For both the placement and quiz scores, the direction of effects is the same across years for all but one item ('private enterprise' for the placement score and 'schools compete' for the quiz) and in both instances one of these models has non-significant information effects. The average aggregate shift in opinion was 11% for both knowledge measures in 1997.

Variable	Placement score				Quiz score			
	Baseline	None	Full	Diff	Baseline	None	Full	Diff
<i>defence</i>	56	51	60	9	56	55	58	3
<i>left wing</i>	54	47	61	14	54	58	54	-4
<i>authoritarian order</i>	55	65	50	-15	55	66	52	-14
<i>schools compete</i>	40	37	44	6	40	31	45	14
<i>fair share</i>	28	31	26	-5	28	28	29	1
<i>one law for rich</i>	62	51	69	18	62	56	66	10
<i>trade unions</i>	73	70	76	5	73	74	72	-2
<i>private enterprise</i>	54	44	61	17	54	41	59	18
<i>public services</i>	33	30	35	5	33	42	30	-12
<i>gov. responsibility</i>	42	32	50	18	42	39	46	7
<i>young people</i>	61	64	60	-4	61	74	56	-18
<i>censorship</i>	9	5	12	7	9	6	10	4
<i>public meetings</i>	16	9	22	14	16	7	21	14
<i>homosexuals</i>	67	56	74	18	67	48	75	27
<i>tolerance</i>	38	29	45	16	38	27	44	17
<i>democracy</i>	48	40	55	15	48	38	55	17
	18	15	20	6	18	11	22	11

bold, italics = significant ($p < 0.05$)

Table 7.4 Knowledge Effects 1997

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The similarity of results across years is also interesting from the perspective of the actual political context at each time point. As the government was Conservative in 1992 and Labour in 1997, the idea that information effects reflect some sort of 'anti-incumbent' sentiment would appear not to be borne out.

7.6.6 Comparing Estimates of Change Across Years

Figure 7.3 shows the scatterplot for predicted scores from all 34 models in 1992 (i.e. placement and quiz score models) against all 34 models in 1997. There is clearly a strong linear relationship between the two sets of predicted scores, with the observations clustering quite tightly around a line of best fit.

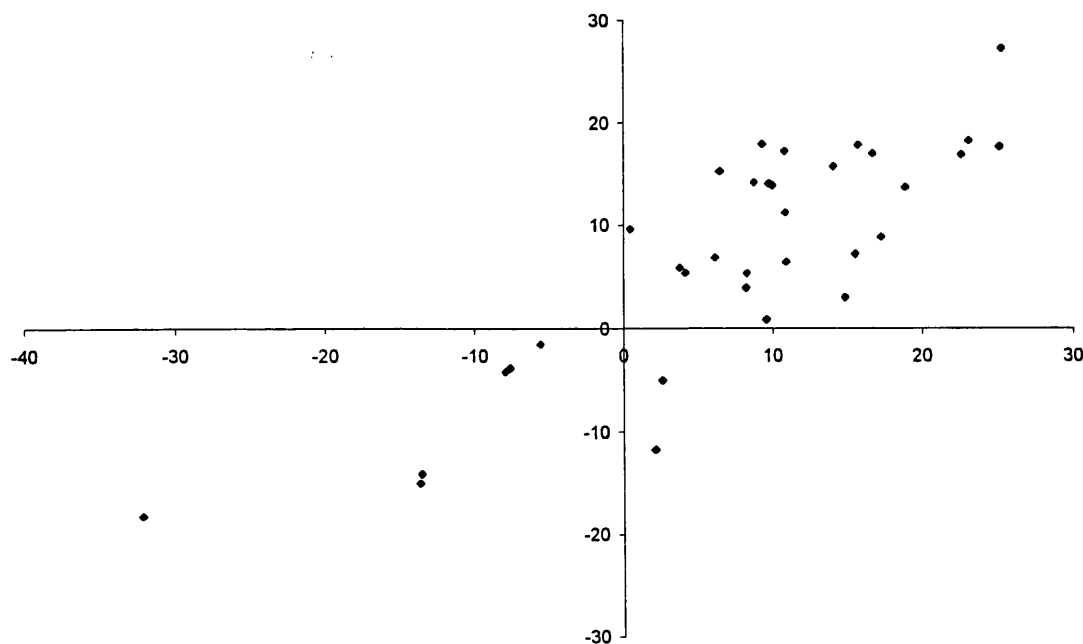


Figure 7.3 *Scatterplot of Predicted Change 1992 v 1997*

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This observation is confirmed by the Spearman rank correlation of 0.78 ($p < 0.01$), which is particularly high given that we should probably expect some degree of change in the relationship between the independent and dependent variables in the intervening five years between surveys. Looking at each knowledge score separately shows that neither really predicts the score on the same model across years better than the other, with the placement score having an inter-year coefficient of 0.80 and the quiz score 0.83.

Remembering that the correlation between the two different knowledge quizzes within each year was 0.72 (1992) and 0.74 (1997) it would seem that the reliability of models using the same information measure over years is slightly higher than the reliability between models using different information measures within the same survey (particularly given the natural degree of change we should expect over a five year period). This should probably be expected if both measures really do tap different aspects of the same underlying knowledge dimension, as was argued earlier and suggests that the effect of knowledge on attitudes is partially determined by the type of knowledge measure used.

7.6.7 Effect of Information on Inter-relatedness of Items

Finally, it is possible to take a tentative look at the extent to which this imputation of different information levels affects the inter-relatedness, or constraint, of belief systems. In chapter six very little evidence was found for any such effect; over the course of a deliberative poll there was only very slight evidence of an increase in the level of statistical association between related attitude items. Table 7.5 shows the mean Pearson correlation coefficient between the predicted values of the six 'left-right' scale items for each of the three information levels in the 1997 BGES.

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	quiz			placement		
info level	all	no quals	quals	all	no quals	quals
actual	0.51	0.47	0.57	0.58	0.55	0.65
none	0.29	0.29	0.32	0.46	0.38	0.42
full	0.71	0.74	0.72	0.68	0.73	0.75

Table 7.5 Mean correlation of left-right items by info group 1997

While the average correlation as a measure of constraint is certainly not ideal (see section 3.3), it was chosen due to the fact that some of the signs of the correlations between predicted scores go in opposite directions which leads to zero order Alpha coefficients. Using the mean of the individual correlation coefficients allows the signs to be cancelled so that we can look only at the absolute magnitude of associations. It should be noted, however, that the frequency with which opposite signs appeared in the correlation matrix was substantially higher for the 'no information' predicted scores, this itself indicating lower levels of inter-item association in this group⁷⁸.

Nonetheless, despite the distance from the original data that the figures in Table 7.5 have come, we can see an interesting pattern for both information scores. The effect of full information, for the whole sample, is to increase the average magnitude of the correlation between predicted scores and the effect of no information is to reduce the magnitude by about the same amount, although the effect seems to be more pronounced with the quiz measure than the placement score. This suggests that the positions on these attitude items predicted by the full-knowledge simulation models are more consistent with

⁷⁸ The distributional properties of the predicted scores also meant that using Maximum Likelihood Estimation to estimate a six item common factor model (equivalent to that used in chapter two), resulted in non-admissible solutions, with values of R square greater than one and negative error variances.

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one another⁷⁹ than those predicted by either the 'no information' model or the 'actual information' models.

Splitting the analysis by educational level reveals that, while those with no qualifications had lower average correlations than those with qualifications in the baseline and 'no information' models, when 'full information' predicted scores were used, there was virtually no difference. This suggests that, once differences in level of political awareness are controlled for, the level of belief system constraint is equivalent across educational level. Table 7.6 shows the same mean correlation coefficients for the six items of the 'libertarian-authoritarian' scale for both the placement and quiz score models in 1997. For the whole sample the pattern is almost exactly the same as that found for the 'left-right' scale items, with full information increasing the level of inter-item association and no information reducing it by a similar amount, relative to the actual information predicted scores.

info level	quiz			placement		
	all	no quals	quals	all	no quals	quals
actual	0.59	0.45	0.52	0.62	0.35	0.59
none	0.30	0.32	0.31	0.27	0.12	0.25
full	0.71	0.65	0.65	0.63	0.53	0.54

Table 7.6 Mean correlation of lib-auth scale items by info group 1997

Looking across educational levels, the pattern is identical to that observed for the left-right scale items – with what might be termed an 'equalising' effect of 'full information' relative to actual and 'no information' models. For the 1992 data, the pattern was very similar for both the 'left-right' and 'libertarian-authoritarian' scales, although the 'equalising' effect of full information across

⁷⁹ Consistency here meaning the strength of statistical association between ordinal rating scales.

educational levels was apparent only in the placement score model for the 'libertarian-authoritarian' scale items (Tables A.5 and A.6 in Appendix A)

7.7 Discussion

In this chapter I have used binary logistic regression models in conjunction with two different measures of political knowledge to simulate what hypothetically 'better informed' and 'less informed' publics would think across a range of political issues. On a substantive level, the results were conclusive in indicating that we cannot assume that low-information rationality and other strategies of the 'cognitive miser' result in attitudes equivalent to those people would hold were they better informed about politics. Generally, respondents became more favourable to left-wing, interventionist policies on economic issues and more libertarian on matters of social policy with greater levels of political awareness. On the one issue examined that related to international affairs, opinion moved in a 'dovish' direction, with support increasing for cuts in defence spending. These results largely corroborate previous research examining the relationship between political knowledge and opinion (Althaus 1998, Bartels 1996, Delli Carpini and Keeter 1996, Fishkin 1991, Fishkin 1995).

The analysis incorporated two separate validation strategies in order to test the reliability of the results; the same models were fitted to two independent samples and two rather different measures of political knowledge were used in otherwise identical models. With small numbers of observations and no real prior expectation as to the scale properties and distribution of predicted change scores, assessments of the closeness of the predictions of different models was not easy. Scanning by eye showed that on most items predictions across years and with different knowledge scores tended to go in the same direction and be of similar magnitudes. Taking a more empirical approach confirmed this general impression, with Spearman rank correlation coefficients

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between predicted change scores in the range 0.7-0.8 across years and knowledge measures. The direction and magnitude of opinion change predicted by these models would appear then to be quite robust.

As a final part of the analysis, differences in the magnitudes of statistical relationships between predicted scores of the individual items of the 'left-right' and 'libertarian-authoritarian' scales were examined. It has always been difficult to link the notion of constraint with individual level attitudes because constraint is traditionally operationalised as a group level phenomenon. This makes it difficult to say – in the absence of objective criteria – that a particular individual's attitudes are more consistent than another's but we can say with some certainty that the level of statistical association between the attitudes of a particular population sub-group is lower or higher than in other groups.

Previous research in this area has therefore tended to rely on cross-sectional analyses – stratifying survey samples by some measure of political awareness and comparing magnitudes of coefficients. Such approaches, however, tend to beg the question of whether it is political information *per se* that causes these differences or some other, unobserved, characteristic(s) of the less politically aware. The analysis presented in this chapter, while still relying on cross-sectional data, was able to move beyond the basic stratification approach to look at how predicted change in attitudes, engendered by increases in political information, impacted on the internal consistency of belief systems. Results indicated that – controlling for a number of important background characteristics – the consistency between attitudes tended to increase with greater levels of political awareness, with noticeably higher average correlations between the items of both scales in the 'full information' models.

The scores being correlated here, of course, were not actually the predicted position on the five point Likert scales but the predicted probability of being in categories 1 or 2 of the questionnaire item – i.e. agreeing with the proposition

stated in the question. What this means for the 'left-right' scale items is that the probability of always taking a left, or a right wing position on economic issues, increases with higher levels of political awareness, while the probability of taking a left wing position on some issues and a right wing position on others decreases with greater political awareness. Interestingly, it was also found that the effect of full information on preference direction served to nullify any residual difference in the average correlation between groups differing in educational level; while the better educated showed higher average correlations on both sets of scale items in the actual and 'no information' models, for the full information models no such differential was apparent. These results then would appear to support the hypothesised link between political awareness and belief system constraint; all things being equal, the more people know about politics, the more consistent their positions across related issues become. This effect is likely to be the result of a combination of two factors: the greater information levels providing a deeper pool of considerations from which stronger, more stable attitudes are derived; and the increase in knowledge about the political landscape engendering a better understanding of which issues 'group together' and why.

Although the current analysis does not justify an extrapolation to individual and group interests, similar previous analyses indicate that the general direction of these information effects seems to result in individuals being better able to "connect their individual and group conditions in a meaningful way with government action" (Delli Carpini and Keeter 1996, p. 250). In terms of political efficacy then, a better understanding of politics may well lead us to adopt attitudes that are in greater accord with our political interests and to support and vote for political actors who most closely resemble our own orientation. And although for a large proportion of the public, issues may be relatively unimportant in determining vote choice, there is a growing body of evidence suggesting that the importance of issues in determining vote is itself mediated by political awareness; with the importance of issue positions in

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determining vote choice growing with higher levels of political knowledge (Delli Carpini and Keeter 1996, Heath and McDonald 1988). Taken together, this suggests that a better informed public would hold significantly different policy attitudes and that these would, in turn, be more important in determining the party or candidate they choose to support.

Would these average shifts in opinion of around 10-15% at the individual level lead to significant changes in the share of the vote or even a reversal in the party winning an electoral majority? This is a moot point and a useful area for future research, although Bartel's (1996) analysis of the direct influence of political awareness on share of the vote in US Presidential elections suggests that such an effect is not at all beyond the realms of possibility⁸⁰. And even if the effect were not substantial enough to affect which party forms the government in a general election, the growing importance of public opinion (as measured through polls and focus groups) on policy making would surely mean that greater political knowledge amongst the general public would have a significant impact on the direction of government policy, if not directly on the party of government. And if we can assume that the direction of attitude change with greater political awareness serves to make our expressed opinions more congruent with our objective interests, then a better informed public is a public with greater and more evenly distributed political efficacy.

⁸⁰ The narrowness of the 2000 Presidential election suggests that in close contests, information effects could prove a decisive factor in themselves.

8 A COMPARISON OF TWO METHODS FOR ESTIMATING INFORMATION EFFECTS

This chapter represents the final piece of empirical work in this thesis, its primary aim being to evaluate the relative strengths and weaknesses of the methodologies used in the previous two chapters and, from this, to gain a fuller understanding of the ways in which political attitudes are related to level of information or awareness. In chapters three to seven a range of quantitative methods were used to examine how the content and structure of Political Belief Systems are affected by level of political knowledge or awareness. In both the stratification approaches of chapters three through five and in the more causally focused analyses of chapters six and seven, a strong case was built supporting the contention that the strength and direction of political attitudes are affected, often substantially, by the individual's level of political knowledge or awareness.

Through the combined influence of opinion polls and issue based voting, it was argued that a better informed electorate could significantly alter the current direction of government policy and even tip the balance in determining the party of government. These findings contribute to the growing body of work which questions the ability of 'low information rationality' and 'cognitive rules of thumb' to make up for genuine political awareness in deriving attitudes that are consistent with the individual's political interests (Bartels 1996, Delli Carpini and Keeter 1996).

In order to have greater confidence in this interpretation of the empirical findings, this short chapter looks more closely at some key methodological issues arising from the analyses presented in the preceding chapters: the measurement of political knowledge and how opinion change is related to

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existing levels of political awareness; and the similarity/difference between predictions made about opinion change under the simulation and deliberative polling methods. The first issue is concerned both with how the political knowledge construct is operationalised and the nature of its relationship with attitude preference direction. The second serves as a kind of mutual construct or 'concurrent' validation – two different methods purporting to reveal the opinions that a better informed public would hold should come up with the same, or at least similar results. Where differences do arise, it will be informative to examine any systematic patterns and how these might be related to the way in which the information effects were estimated. Given the substantial difference in the cost of conducting a deliberative poll⁸¹ and of fitting simulation models to existing survey data, the degree to which the two approaches concur may well be of practical as well as theoretical and methodological interest.

8.1 Similarities and Differences

In discussing the rationale underlying the development of the deliberative poll, Fishkin argues that “the resulting survey offers a representation of the considered judgement of the public – the views the entire public would come to if it had the same experience of behaving more like ideal citizens immersed in the issues for an extended period” (Fishkin 1995b, p. 162). This is clearly very similar to claims made for what the simulation approach can achieve. For Bartels this method can tell us “how the preferences of this hypothetically “fully-informed” electorate might differ from the preferences of the actual electorate” (Bartels 1996, p. 204), while Althaus contends that it allows us to

⁸¹ Although no actual cost estimates are available, it can be safely assumed that a deliberative poll would cost at least twice as much, if not more, than a standard political attitude survey. The issued sample for the first wave is usually in the region of 1500-2000 and the cost of collecting around 300 people together and accommodating and feeding them etc. over a whole weekend must be substantial.

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“estimate how the opinions people express in surveys might change if respondents were more completely informed about the issues” (Althaus 1998, p. 547). However, while the two approaches are clearly seeking the same ends, the means of getting there are very different indeed.

8.1.1 Artificiality and Realism

While the situational context of the deliberative poll has been criticised for being unrealistic and stylised in relation to how political opinions are actually formed and change in the real world (Ladd 1996, Mitofsky 1996b, Newport 1996), in many respects it is this method that could be argued to have the higher claim to what we might term ‘naturalism’ or ‘realism’ – these are real people discussing real issues and the opinions they express at each stage of the exercise are their actual, stated positions at each level of awareness⁸².

The simulation approach, on the other hand, uses quite sophisticated statistical modeling techniques to *impute* opinions that cannot be said to ever have actually existed. There is always going to be something inherently unsatisfactory about a technique that involves ‘putting words in people’s mouths’ rather than eliciting some form of verbatim response. Bartels concedes that the simulation approach to estimating information effects does not take into account the factors that differentially motivate people to acquire political information, nor does it “distinguish between the specific effects of factual information about politics and the broader effects of cognitive styles and information processing behaviour that may differentiate well informed from uninformed citizens” (Bartels 1996, p. 204).

⁸² Notwithstanding, of course, errors in the measurement of these latent attitudes.

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Such factors are likely to revolve around the idea that the better informed not only have access to a deeper pool of relevant considerations from which to derive their opinions but that they are also better equipped to efficiently evaluate and integrate novel incoming information as well. This implies that information processing capacity is positively related to political awareness such that as our ability to digest, evaluate and integrate new information improves, our knowledge levels grow at an ever increasing rate - resulting in a widening knowledge gap between the information rich and poor.

While, on the face of it, this may seem like a serious flaw in the simulation approach, Althaus actually sees it as a positive advantage relative to quasi-experimental methods such as deliberative polling. For, he argues, the simulation approach imputes not only information levels to the less informed but also the “cognitive styles, information processing strategies...the knowledge stored in short-term memory that affects how new information is perceived and used to update attitudes...and the confidence, developed through experience, that one is able to understand complicated political issues and events” (Althaus 1998, p. 547). The deliberative poll, he contends, is simply too short a time period and too artificial an environment for the less informed to genuinely make up the ground on their better informed counterparts.

8.1.2 *Sample Composition and Claims to Generality*

Likewise, another characteristic of the deliberative polling method that is often cited as one of its greatest strengths, could also be argued to be a weakness relative to the simulation approach. Fishkin has repeatedly pointed to the fact that the deliberative poll is based on a random probability sample to justify his claims that the method can operate as a ‘recommending force’ in modern democracies (Fishkin 1995a, see p. 169-171, Fishkin 1995b). A properly conducted probability sample allows such statements to be made, because we

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can feel confident that the estimated distribution of opinion may be generalised to the population as a whole and not dismissed as an artefact of self-selection.

However, if there are significant biases in the composition of the deliberative sample, the confidence with which we can generalise to the broader populace is seriously diminished. This is all the more problematic when opinion change is related to demographic characteristics of the respondents. For example, if the less politically aware are more likely to experience attitude change and are under-represented in the sample, then the error in our posterior estimates of opinion will be compounded (Mitofsky 1996a). In chapter seven evidence was presented to show that there is cause for concern over the representativeness of the sample for the 1997 UK deliberative poll on election issues. This corroborates findings of sample bias in similar polls conducted in the US, which found evidence of under-representation amongst older people, the less educated and the less politically interested (Merkle 1996).

Thus, while deliberative polling may have better claims to representativeness than other 'deliberative' methods such as citizens juries, in comparison with simulation modeling approaches, it would appear to again be at a disadvantage. For while we might reasonably expect the 'pre' survey to attain estimates as free from bias as would be obtained in standard political attitude surveys (of the sort on which simulation models are used), the same cannot be said of the 'post' survey estimates. By inviting a subset of the initial sample to the deliberative session, a further opportunity for selection bias is introduced into the sampling procedure. Given the taxing nature of the task, the high investment required in terms of time and effort and the general lack of interest in the subject matter, it is highly likely that the sorts of biases discussed above are commonplace in deliberative poll samples.

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8.1.3 Knowledge Measures and the Omitted Variable Problem

The key problems for the simulation approach, on the other hand, are the measure of knowledge used and the covariates included in the model. The analyses of chapter seven go some way to addressing the issue of how the choice of measure of knowledge or awareness is related to our estimates of attitude change. Using two rather different measures of political knowledge, very similar estimates of opinion change were obtained on two independent samples. In conjunction with the broad similarity of these results to previous simulation models conducted in the United States (see sections 7.2 and 7.6), it would appear to be the case that, while political knowledge may be a multi-dimensional construct, people tend to be 'generalists' and so whichever measure of knowledge we use, we will obtain broadly similar results.

The problem of which covariates to include in the model is also a barrier to accepting the validity of the simulation approach, because we might always question the estimates of information effects on the grounds that important variables have been omitted from the baseline model. These may be variables contained in the data set that we have not included by choice, or individual characteristics on which no measures were obtained. Either way, it is possible that what we construe as an information effect may in fact only be the direct effect of an omitted variable mediated by our measure of political knowledge. This, however, is an inherent problem of virtually all statistical techniques which seek to simplify reality to a set of linear and non-linear relationships between measured constructs. It is always likely that, no matter how well specified the model, there are exogenous factors exerting some influence on the endogenous relationships. The important thing, therefore, is to build models on the basis of theory so that, even if we cannot say with certainty that this is the definitive and exhaustive list of factors which affect a particular political attitude, we can say that having controlled for a broad range of theoretically related factors, knowledge still has a significant effect on the distribution of opinion. This approach is known as 'reduced form' modeling

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because it does not seek to accurately represent reality but merely a simplified version thereof. It is important to raise this as an additional differentiating characteristics between the simulation and deliberative polling approaches to estimating information effects before proceeding to an empirical comparison in the following sections.

8.2 Method

This analysis compares the estimates of information effects on political attitudes obtained through the simulation modeling and deliberative polling methods. Simulation models are fitted to the first wave data from the 1997 UK political issues deliberative poll. The estimates of opinion change obtained from these models are then compared with estimates from the 'post' survey of the deliberative poll (n=274). The simulation modeling method is described in detail in section 7.3 and the same approach is adopted here. To recap briefly, in order to create the dependent variables for the analysis, Likert scale items are dichotomised such that those agreeing with each statement are coded '1' and those not agreeing are coded '0'. The dependent variable is then regressed on to the set of covariates described in section 8.2.1 in addition to the interaction of all demographic covariates with the knowledge score variable. Knowledge scores are then changed to the maximum on the scale and the models re-estimated using the parameter estimates from the first model. Taking the difference between the mean of the predicted probabilities from each of these models gives an estimate of opinion change with full information.

One complicating factor in fitting these models concerned which sample of respondents from the deliberative poll should be used for the simulation analysis. On the one hand, it would seem sensible to use the entire 'pre' sample of 1210 respondents, as the larger sample size would provide more reliable estimates and be generally more representative of the target population. However, adopting this approach complicated comparisons with

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the estimates of opinion change from the deliberative poll as the proportion of people in category '1' of each dependent variable in the full sample was different than in the 'weekend only' sample (and change scores for the deliberative poll were, of course, only available for the weekend sample of respondents). While this was primarily just a natural result of sampling variation⁸³, it complicated comparisons between the two methods because the estimate of change in each instance was being taken from a different base. It was therefore decided to fit the simulation models to the 'weekend only' sample of 275 respondents⁸⁴. One outcome of this decision was a loss of power for statistical tests, resulting in a relatively high proportion of non-significant models and individual parameters. However, this should not cause too much concern as when exactly the same models were fitted to the whole sample of 1210 respondents, all but five of the forty two models showed significant information effects at the $p < 0.05$ level or less and the number of significant parameters also increased significantly.

8.2.1 *Covariates and Dependent Variables in the Models*

The covariates included in these models were chosen, as far as possible, to resemble those used by Bartels and Althaus. These included age (and age squared), educational level (age finished formal education), income (in thousands of pounds) ethnic group, sex, housewife (yes/no), retired (yes/no), married (yes/no), union member (yes/no), on state benefits (yes/no), self-employed (yes/no), professional (yes/no), manual worker (yes/no), reads tabloid newspaper (yes/no), children in household (yes/no). These cover all the covariates used by Bartels, excluding religion and region of residence –

⁸³ Although it should be noted that some of these between-sample differences were quite large, raising further questions about the representativeness of the 'microcosm' sample.

⁸⁴ This corresponds with how Fishkin himself presents the headline results from this deliberative poll in his own publications (Fishkin, 1997 p. 218-220).

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neither of which are as important determinants of political orientation in the UK as in the US.

There were forty two items on both the 'pre' and 'post' questionnaires that were considered suitable for estimating information effects. These covered: general attitude toward each of the three main parties; retrospective evaluations of the economy and public services; prospective evaluations of the economy and public services under (a) the Labour Party and (b) the Conservative party; attitude toward the correct levels of taxation and spending in Great Britain; attitude toward the minimum wage, equality of income and the European Union; and voting intentions. Full wordings for these items are provided in Appendix B. Some of these items are perhaps more suitable than others for estimating the effects of information on the direction of political attitudes. The questions on retrospective evaluations of the economy, for instance, could be argued to be more factual than opinion based. However, it was decided to include all forty two items in the analysis because (a) these were considered important areas of political debate at the time this deliberative poll was designed and (b) all of them could be argued to affect evaluations of the main parties and, therefore ultimately, voting intentions. On the original questionnaires these items were in five point Likert scale format. As the simulation models were logit models, these were recoded to zero and one to indicate whether the respondent agreed with the statement in the item or not.

8.2.2 The Measure of Knowledge Employed

The choice of knowledge measure to use in the models was, unfortunately, somewhat limited. As, Merkle has pointed out, given the emphasis Fishkin places on knowledge as a determinant of attitude, it is surprising how few measures of political awareness or knowledge have been included in these polls (Merkle 1996, p. 594). In the current instance a three item (true/false)

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quiz was administered toward the end of both the 'pre' and 'post' deliberation questionnaires. These items addressed respondents' factual knowledge about recent trends in interest rates and unemployment. Full wordings are shown below.

Wordings for Three Item Knowledge Score

1. Prices have been rising by less than 5% a year over the past few years.
2. Interest rates are decided by the Bank of England.
3. Unemployment in Britain is higher than in Germany.

Due to the brief nature and lack of conceptual coverage of this quiz, a further measure was derived to tap respondents' knowledge of the policy stances of the three major parties. This measure was very similar to that used in the models fitted in chapter seven and described in section 7.4.1. On each of four policy issues, respondents were coded '1' if they placed the Conservatives to the right of the Labour party and the Lib Dems and '0' otherwise. This produced a score ranging from zero to four. The policy issues addressed were: what priority should be given to making incomes more equal?; the balance between taxation and public spending; the introduction of the minimum wage; and European integration (Full wordings in Appendix B). This policy knowledge measure was then summed with the three item scale to form a normally distributed scale ranging from zero to seven which correlated 0.42 ($p < 0.001$) with self-reported interest in politics. A histogram of this scale is shown in Figure B.1 in Appendix B.

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8.3 Results

8.3.1 *Estimates of Information Effects Under both Methods*

Table 8.1 shows the proportion of people agreeing with the statement presented in each item at wave one of the deliberative poll (column 1) along with the estimated proportion under full information for both wave two of the deliberative poll (column 2) and the simulation models (column 3). Columns 4 and 5 show the estimated aggregate change from the deliberative poll and simulation models respectively. Perhaps the first thing to note from Table 8.1 is the relatively small size of the effects.

Table 8.1 *Comparison of Estimates Across Methods*

Item	Del. Poll t1	Del. Poll t2	Simulated full info.	Del. Poll difference	Simulated difference
In favour of Tories	26	23	29	-3	3
In Favour of Labour	51	52	54	1	3
In favour of Lib Dems	24	58	52	34	28
Economy has got stronger since '92	40	42	51	2	11
Inflation has gone up since '92	37	25	35	-12	-2
unemployment has gone up since '92	42	40	34	-2	-8
taxes gone up since '92	65	61	73	-4	8
Quality of NHS gone up since '92	7	8	24	1	17
Education service improved since '92	10	6	15	-4	5
Economy would be stronger < Tories	32	29	38	-3	6
Economy would be stronger < Labour	35	43	41	8	6
Inflation would go up < Tories	58	51	55	-7	-3
Unemployment would go up < Tories	48	45	42	-3	-6
Taxes would to up < Tories	68	64	58	-4	-10
NHS service would improve < Tories	12	13	30	1	18
Education would improve < Tories	18	17	24	-1	6
Inflation would go up < Labour	60	59	74	-1	14
Unemployment would go up < Labour	22	26	20	4	-2
Taxes would go up < Labour	58	47	67	-11	9
NHS service would improve < Labour	50	63	54	13	4
Education would improve < Labour	48	57	55	9	7
I would be better off under the Tories	26	28	34	2	8
British tax system is fair/very fair	33	28	29	-5	-4
People on £50 000 should pay more tax	66	81	70	15	4

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Table 8.1 Contd. Comparison of Estimates Across Methods

Item	Del. Poll t1	Del. Poll t2	Simulated full info.	Del. Poll difference	Simulated difference
Gov. should equalise incomes	63	73	55	10	-9
Gov. should spend > on public services	87	87	85	0	-3
Gov. should introduce minimum wage	78	69	77	-10	-1
Britain should unite with Europe	37	49	44	12	7
GB is over-taxed compared to others	45	35	47	-10	2
GB spends too little on public services	72	64	67	-8	-5
GB will lose sovereignty without £	68	47	58	-21	-10
People on high incomes better < Tories	81	82	82	1	1
People on low incomes better < Tories	12	11	18	-1	6
People on benefits better off < Tories	6	7	8	1	2
Pensioners better off < Tories	9	8	22	-1	13
People on high incomes better < Labour	13	15	14	2	1
People on low incomes better of < Labour	66	68	69	2	3
People on benefits better off < Tories	55	51	63	-4	8
Pensioners better off < Labour	60	56	64	-4	4
Would vote Tory in a General Election	26	19	27	-7	1
Would vote Labour in a General Election	50	39	51	-11	1
Would vote Lib Dem in a General Election	12	33	25	21	13

The majority of items show less than a ten percent shift in opinion on both the simulation and deliberative methods and a great many show shifts of only one or two percentage points. The average absolute magnitude of change across items is only 7% for both the deliberative poll and the simulation models. Across both methods, only six items show a reversal in the majority position with more political information (favourability of attitude toward the Lib Dems; Economy got stronger since '92; Taxes will go up under Labour; Education would improve under Labour; GB will lose control of economy with the pound; and intention to vote Labour). Despite this general pattern, however, there are a number of issues which show a quite substantial shift in aggregate opinion with more information. Interestingly, both the deliberative poll and the simulation method show very large increases – 34% and 28% respectively – in favourability ratings for the Liberal Democrats. This effect, though somewhat attenuated, still comes through on the voting intention

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question with support for this party increasing by around 20% in the deliberative poll and by 13% in the simulation model. Were such an effect translated to an actual General Election, while not removing Labour's parliamentary majority, it would nevertheless effect a large increase in the number of seats held by the Liberal Democrats, perhaps even leading to their displacing the Conservatives as the official party of opposition.

The item showing the second largest information effect is that relating to Britain's relations with Europe. Across both methods, more information led to a significant reduction in opposition to European Monetary Union and to people being much less likely to believe that keeping the pound is crucial to maintaining Britain's economic independence. Other items showed quite substantial information effects, although not so consistently across methods. For example, the simulation models showed quite large increases in the proportion of people believing that the NHS would improve under the Conservatives, that inflation would go up under Labour and that pensioners would be better off under the Conservatives⁸⁵.

The deliberative poll showed that, with more information, less people were likely to think taxes would go up under Labour; more were likely to think the NHS would improve under Labour; and more were likely to think that high earners should be paying more tax. While clearly not uniform across issues then, information can nevertheless be said to have a significant impact on both the direction of aggregate public opinion and voting intentions. In terms of the general direction of effects, the pattern is less clear than was found in chapter seven and in previous research into the effect of knowledge on attitudes toward social and economic policy. This is partly a result of disagreement across methods and partly because the pool of items considered is more

⁸⁵ Note that this does not mean better off *relative to* what their standard of living would be under Labour or the Liberal Democrats but compared to what it is now.

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focused on party evaluation and support and has less coverage of social issues and no coverage of foreign policy (apart from the item concerning EMU).

Nonetheless, the increased support for the Liberal Democrats suggests a tendency toward favouring left/centrist economic policies – a trend which is supported by some of the more specific items concerning fiscal policy. For example, there was increased support for raising tax on higher earners, more spending on public services and a general growth in the proportion of people believing in the economic competence of a prospective Labour government. Elsewhere, however, there were a number of items on which increased support for the Conservatives and their economic policies undermined the general trend toward a more economically left-wing public with greater levels of political awareness. For example, the deliberative poll showed a ten percent reduction in support for the introduction of a minimum wage, while the simulation models showed a similar reduction in support for equalising people's incomes.

As was noted above, on several items, the two methods disagreed not only on the magnitude but also on the direction of information effects. How then should we evaluate the extent to which these two methods agree or disagree with one another? If we are particularly interested in how aggregate opinion might change on a specific issue as the public becomes more knowledgeable, then it is highly likely that the two methods will produce conflicting results. While, on several items there is a high degree of consensus, there is no real way of determining *a priori* which issues these might be⁸⁶ and, given the large number of items under consideration, there are bound to be some close

⁸⁶ Although an interesting *post hoc* hypothesis is that agreement is higher and information effects more substantial on issues that are not of great public interest or controversy. In areas such as the European Union and Lib Dem economic policy – neither of which are of particular prominence in the minds of the British public nor in the media – both methods show similar, large estimates of change.

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agreements due to chance alone. The average absolute magnitude of difference between the estimates produced by the two methods was eight percentage points – greater than the average estimate of aggregate change under either method. If we are looking for precise estimates on individual issues, then, the two methods would appear to provide quite conflicting results and, of course, there is no real way of determining which is closer to the ‘truth’.

If we are more interested in the broader picture, however, the two methods can be argued to show a very similar pattern of results. To the general question, ‘what is the effect of increases in information on attitudes toward these political issues?’ both methods provide essentially the same answer – ‘not that much on the whole, but with some notable exceptions’. Indeed, Figure 8.1 which shows the scatterplot of deliberative poll estimates against simulation model estimates across the forty eight items, bears out the convergence of results provided by the two methods when looking at the general pattern rather than expecting exact replication of estimates.

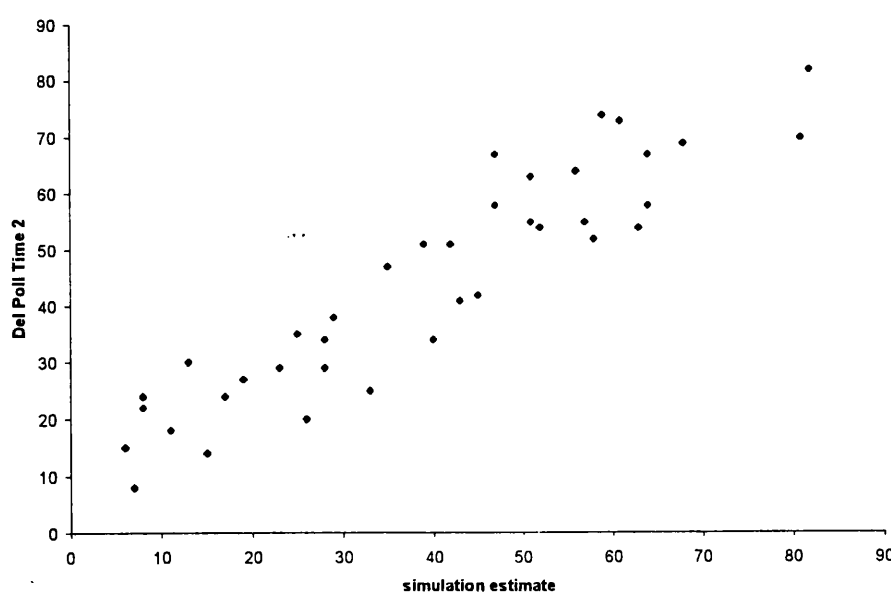


Figure 8.1 *Information Effects Simulation Model v Deliberative Poll*

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All the points in Figure 8.1 cluster tightly around the line of best fit, with a Pearson correlation coefficient of .92 ($p < 0.001$). While there is perhaps something somewhat tautological about this spread of points – if both models are estimating change from the same base and neither predicts much change, the covariance between estimates must be high – the generally low level of estimated change could not be predicted *a priori* and the fact that some change estimates are as large as 34% shows there is nothing inherent in the models which predisposes change estimates to be small. Perhaps in other areas, say attitude toward new scientific technologies, estimates of the effect of information on attitudes might be far larger. As it is though, both methods agree on the basic fact that information effects tend to be rather modest on these issues. This interpretation should not be taken, however, as downplaying either the importance of information in determining both individual and aggregate public opinion nor the level of agreement between these two very different approaches to measuring information effects.

8.3.2 Aggregate *v* Individual Change across Methods

Table 8.2 shows the aggregate and individual level change across all forty two items for both estimation methods. Individual level change corrects for self-cancelling to reveal the absolute proportion of people changing sides on each item. What Table 8.2 clearly shows is that estimates at the aggregate level mask a great deal of individual level volatility. Another way of thinking about this is that, if everyone who changed their position between time one and time two had moved in the same direction, the estimate of information effects would have been four times higher for the deliberative poll (an average of 25%) and three times as high for the simulation models (an average of 20%). For the deliberative poll this interpretation is, of course, clouded by the issue of measurement error and natural true change (i.e. we would expect some degree of ‘churn’ between time one and time two without any specific ‘information intervention’). However, for the simulation models all change estimates

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should be free from such considerations, because the estimates of attitude change are purely a function of the parameters of the baseline model. This, then, shows that information can interact in complex ways with existing background characteristics to produce opinion change in either direction, depending both on one's initial position and on one's reasons for adopting it.

Table 8.2 Aggregate and Individual Change

Item	Aggregate		Individual	
	Del Poll	Simulation	Del Poll	Simulation
In favour of Tories	3	3	14	17
In Favour of Labour	1	3	18	22
In favour of Lib Dems	34	28	40	31
Economy has got stronger since '92	2	11	26	23
Inflation has gone up since '92	12	2	36	26
unemployment has gone up since '92	2	8	33	28
taxes gone up since '92	4	8	34	21
Quality of NHS gone up since '92	1	17	9	22
Education service improved since '92	4	5	10	13
Economy would be stronger < Tories	3	6	24	19
Economy would be stronger < Labour	8	6	25	23
Inflation would go up < Tories	7	3	33	12
Unemployment would go up < Tories	3	6	31	18
Taxes would to up < Tories	4	10	27	24
NHS service would improve < Tories	1	18	12	24
Education service would improve < Tories	1	6	15	15
Inflation would go up < Labour	1	14	32	28
Unemployment would go up < Labour	4	2	25	13
Taxes would go up < Labour	11	9	34	18
NHS service would improve < Labour	13	4	34	23
Education service would improve < Labour	9	7	35	27
I would be better off under the Tories	2	8	15	19
British tax system is fair/very fair	5	4	27	21
Gov. should try harder to equalise incomes	10	9	29	18
Gov. should spend > on public services	0	3	17	22
Gov. should introduce minimum wage	10	1	24	23
Britain should do more to unite with Europe	12	7	33	13
People earning £50 000 should pay more tax	15	4	25	16
GB is over-taxed compared to others	10	2	34	18
GB spends too little on public services	8	5	28	16

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Table 8.2 Contd.

Item	Aggregate		Individual	
	Del Poll	Simulation	Del Poll	Simulation
GB will lose control of economy without £	21	10	29	19
People on high incomes better off < Tories	1	1	22	10
People on low incomes better of < Tories	1	6	16	15
People on benefits better off < Tories	1	2	10	7
Pensioners better off < Tories	1	13	9	20
People on high incomes better off < Labour	2	1	17	15
People on low incomes better of < Labour	2	3	28	23
People on benefits better off < Tories	4	8	35	27
Pensioners better off < Labour	4	4	32	20
Would vote Tory in a General Election	7	1	12	14
Would vote Labour in a General Election	11	1	20	23
Would vote Lib Dem in a General Election	21	13	23	19
Mean	6	7	24	20

On issues where attitudes are less strongly held and based on a shallower pool of relevant considerations, we might expect change to occur in a more uniform direction resulting in larger aggregate shifts in opinion. Examples of this in the present context might be the items relating to British integration into Europe and evaluations of the Liberal Democrats which showed quite large aggregate effects on the basis of more uni-directional individual level change.

8.3.3 *Estimates of Opinion Change Across Methods*

Earlier I suggested that measures of association between estimates produced by the two methods might be biased in an upward direction, artificially enhancing the apparent agreement between methods, because they both predicted rather small amounts of aggregate change from the same base. Figure 8.2 goes some way to countering this interpretation. Rather than plotting the estimates of the actual proportions supporting or opposing a particular position against one another, Figure 8.2 plots only the estimates of *change*. As can be seen, this results in a broader spread of points around the line of best fit, although there is clearly still a high degree of association

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between the estimates produced by the two methods (Pearson's $r = 0.52$; $p < 0.01$). The similarity of these estimates across two very different methods lends some support to the validity of the findings of each approach.

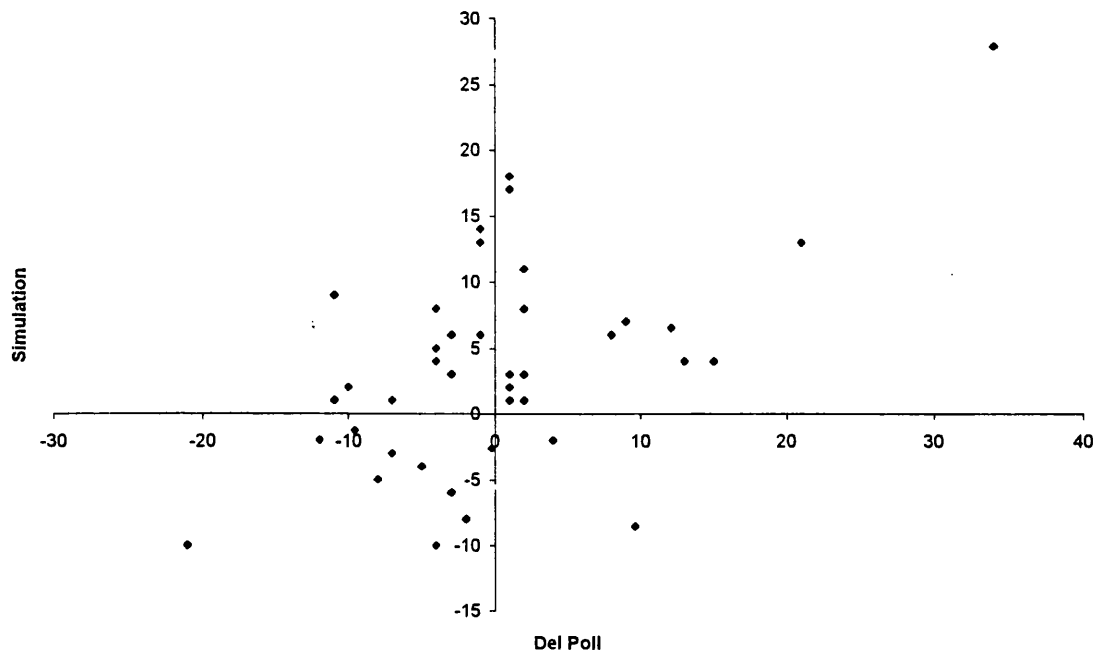


Figure 8.2 Estimates of Opinion Change Simulation v Deliberative Poll

8.4 The Relation between Information and Attitude Change

As a final adjunct to this chapter, I take a brief look at the extent to which knowledge increases can really be said to underlie changes in attitude and how the amount of attitude change is related to existing levels of political awareness. The rationale of the preceding chapters – and that of Fishkin, Bartels, Zaller and Feldman et al. – would suggest that opinion change should (a) result from increases in political information and (b) be greatest amongst the less well informed. This is implicit in the minimalist, nonattitude

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perspective which sees the attitudinal responses of the uninformed as essentially random and unrelated to any real, underlying cognitive entity. Compared to the labile nonattitudes of this group, the attitudes of the better informed are actually derived from considered, preference based judgements and are, therefore, 'stronger' and more resilient to change.

The same rationale can be deduced more explicitly from the averaging and availability axioms of Zaller & Feldman's 'simple theory of the survey response' (Zaller and Feldman 1992). As the pool of relevant considerations about a particular issue grows in size (i.e. the amount of information the individual possesses increases), people are more likely to select the same response alternative over repeated administrations and their responses become less susceptible to contextual variations. Another way of putting this is that more politically aware individuals should possess attitudes that are more stable and resilient against persuasive communications. If, over the course of a deliberative poll, we were to find no empirical evidence of a genuine increase in political awareness, or that the amount of opinion change is just as high (or higher) amongst the initially best informed as amongst the least informed members of society, then our conclusions concerning the relationship between political knowledge and attitude would be called into question.

Figure 8.3 shows the distribution of scores on the knowledge scale at waves one and two of the deliberative poll. By this measure, then, there has been a clear and significant increase in the political awareness of the sample over the course of the deliberative weekend ($p < 0.001$)⁸⁷. Given the fact that the 'weekend sample' was already significantly more interested in and knowledgeable about politics than the general population before participating in the deliberative poll, Figure 8.3 probably underestimates the true level of knowledge gain that would be found in a more representative sample. The

⁸⁷ Paired samples t-test.

increase in knowledge over the deliberative weekend shown in Figure 8.3 also lends support to the validity of the knowledge measure used in the simulation models in this chapter.

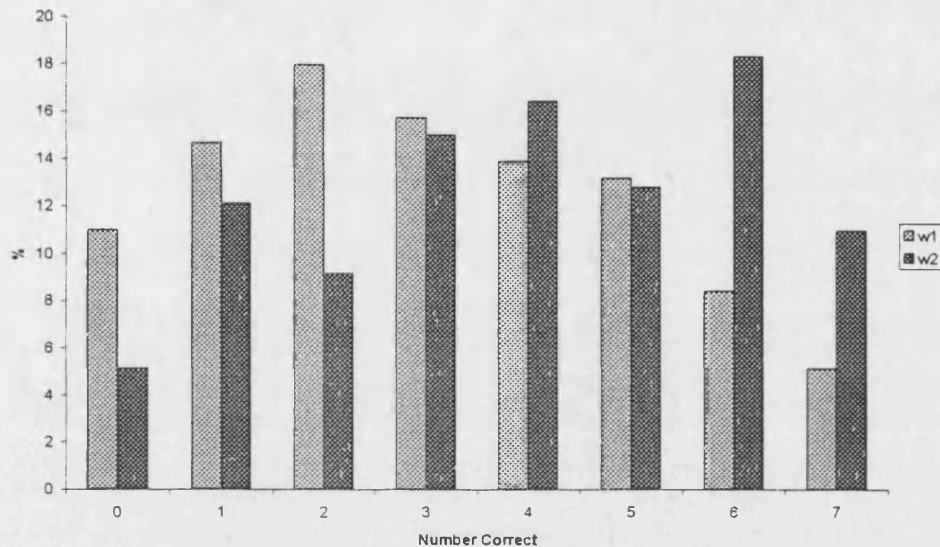


Figure 8.3 Distribution of Knowledge Scores Before and After Deliberation

Although this does not prove any causal link between knowledge gain and opinion change, we can at least be more confident that the sample members have, on the whole, actually experienced increases in political knowledge following the 'information intervention'. The next matter of interest concerns whether opinion change was greatest amongst those who were least informed at the start of the deliberations. Table 8.3 shows, for each level of the knowledge score⁸⁸ at time 1, the sum of the absolute differences in item scores before and after the deliberative weekend⁸⁹. The absolute amount of change

⁸⁸ For the sake of simplicity, table 8.3 uses the four point policy knowledge scale. The pattern, however, is the same using the longer 7 point combined measure.

⁸⁹ Only Likert scale items were included in this analysis.

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across items decreases with every additional correct answer on the knowledge scale (although there is very little to discriminate the amount of change for those scoring between zero and three). This effect is still apparent despite the strong tendency, amongst those with low scores on this measure, to provide nonsubstantive responses to the attitude items at both waves of the deliberative poll. The effect of this is to underestimate the extent of attitude change when over-time differences across items are summed because a nonsubstantive response at either wave results in the difference score for that item being zero, despite the fact that the same response was not given at both waves.

Knowledge score time 1	Sum of change in item scores	N	Std. Deviation
0	29.5	90	10.7
1	29.3	49	7.6
2	29.2	44	9.1
3	28.3	49	7.9
4	24.0	41	7.1
Total	28.4	273	9.1

Table 8.3 Mean Opinion Change by Initial Knowledge Score

As we have only two points of measurement, it is not possible to determine what proportion of this response instability is actually due to attitude change. Remember from section 5.2 that, on similar items, typically around 10-20% of respondents switch sides from one time to the next on standard panel surveys. However, given the 'strong' nature of the information intervention (Fishkin and Luskin 1996) and the evidence from Figure 8.3 showing a genuine increase in political knowledge over the course of the weekend, it would seem unreasonable to argue that the attitudes reported at time two are uncognized 'top-of-the-head' responses derived from a shallow or non-existent pool of considerations. A far more likely explanation is that, as expected on the basis of theory, we see attitude change across the range of political awareness but

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particularly concentrated amongst the least politically knowledgeable. In order to test this properly, additional waves of measurement would be needed, in which we would expect to see an evening out in both political awareness and, consequently, response stability. Testing this hypothesis in the current instance, however, by correlating change in the knowledge score with level opinion change at the individual level showed no significant association (Pearson's $r = 0.04$).

8.5 Discussion

In this chapter I have looked more closely at some of the key constructs, operationalisations and methodologies employed in the earlier chapters of this thesis. Fitting simulation models to the first wave of a deliberative poll on political issues showed quite a high level of agreement between the two methods in their estimates of opinion change with increased levels of information. Generally, both methods showed that the effect of information on aggregate opinion was quite modest, although with some notable exceptions. Self-cancelling across respondents masked individual change some three to four times greater than was apparent at the aggregate level on both methods. It was hypothesised that, in less controversial areas in which the public is less well informed, information effects might be both more substantial and unidirectional and, hence, of greater magnitude in the aggregate.

If called upon to make precise estimates of information effects on single issues, the convergence of the two methods is less impressive, although still much better than chance alone would predict. There was some evidence to support the general direction of effects found in the simulation models fitted in chapter seven and in previous investigations of information effects – a tendency to favour more left wing and liberal economic and social policies with increasing political awareness – although the evidence from the analyses presented in this chapter was much more patchy. The general similarity of the estimates

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produced by these two very different methods was argued to lend simultaneous support to the validity of both approaches. However, given the broad similarity of the estimates, the absence of any 'gold standard' for determining what 'enlightened opinion' really would be, the lack of any real precision in the estimates of either model⁹⁰, and the vastly greater expense involved in conducting a deliberative poll, the evidence presented in this chapter suggests that it would be sensible to use the simulation modeling approach as a first recourse when attempting to estimate information effects on public opinion.

Additional analyses examined the empirical evidence for an increase in political awareness over the course of the weekend of deliberation and how initial level of awareness was related to subsequent attitude change. Results showed that opinion change was underpinned by a growth in political awareness and that this attitude change was greatest amongst those respondents who initially scored lowest on the political knowledge measure. This supports the contention made in earlier chapters that as people become better informed they develop political attitudes that are more considered, more stable and more internally consistent. Two major problems with such conclusions, however, relate to our ability to identify the best informed members of our sample and the nature of the relationship between knowledge and attitude preference direction.

For example, in the simulation models, while controlling for a range of background characteristics, we impute the knowledge levels of the best informed members of society to everyone and then estimate the effect of this new knowledge on their political attitudes. While both Bartels and Althaus refer to this process as estimating the opinions of a 'fully informed' public, this

⁹⁰ There is no sampling distribution from which to estimate standard errors for the predicted probabilities of the simulation models and the standard errors for point estimates from the deliberative poll are around 5% for sample sizes between two to three hundred.

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is clearly something of an overstatement. For scoring full marks on a short survey measure of political knowledge certainly does not equate to being 'fully informed' about politics. It is, of course, more accurate to refer to this technique as imputing the opinions of the currently *best* informed to everyone, notwithstanding the fact that there is bound to be some degree of error and lack of sensitivity in our attempts to isolate this 'best informed' sub-group of the population. Once we admit this weaker version of the hypothesis, however, new questions emerge concerning the sensitivity at the top end of our knowledge scale. If, as seems certain, the 'ceilings' of our knowledge measures do not reflect a true endpoint in terms of political knowledge, then the question turns to the issue of the nature of the relationship between knowledge and attitude, specifically, is it linear? For if there is both room for increases in political knowledge amongst those scoring highest on the knowledge measure and the relationship between knowledge and attitude is non-linear, then our estimates of what a better informed public would think may be seriously biased.

The same doubts may, of course, also be raised about the estimates produced by deliberative polls. – if we observe attitude change after the 'information intervention', can we really assume that these more considered opinions reflect some sort of endpoint, or would lengthening and broadening the deliberative process lead to further shifts in the same or even opposite directions? In many respects such questions are philosophical in nature and not really amenable to empirical analysis. They relate to the inherent provisionality of all 'knowledge' and the inevitable contestability of political discourse. However, we need not necessarily pursue such a strong version of the 'information deficit' hypothesis for concerns over the low levels of political interest, involvement and knowledge of the general public to be justified. Such concerns should not be taken to suggest that knowledge acts as some sort of homogenising force in relation to political attitudes – if everyone were better informed, they would hold more or less the same opinions. Rather, it should be taken to mean that

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with more information, individuals are better able to connect their political preferences with their own self-interest, whatever they might judge their self-interest to be. Beyond a certain level of knowledge or awareness, there is undoubtedly a high degree of diminishing marginal returns in the extent to which this connection is facilitated. However, this should not distract us from the basic point that, for a great many people, the point at which such returns would start to diminish is currently a long way off indeed.

9 DISCUSSION AND CONCLUSION

In this thesis I have attempted to evaluate the role that knowledge or information about politics plays in determining both the content and structure of individual and group belief systems. In so doing I have drawn on a tradition of research located at the boundaries of social psychology, sociology and political science. And while the primary focus of my analysis has been on the social psychology of attitude formation and change, it is hoped that some contribution has also been made toward more normative concerns over individual and group efficacy and how this is related to citizen knowledge and engagement within a democratic polity. In this regard, the main findings from the analyses presented here show that a significant proportion of the general public are not very sophisticated in the way they think about politics: they do not seem to regard political issues as inter-connected or related to higher order values and beliefs and, in many ways, cannot be said to hold attitudes *at all* across a broad range of prominent political issues.

Furthermore, this tendency seems primarily related to an individual's level of political awareness and engagement – with the least politically knowledgeable and interested being the most likely to switch sides on the same issue over time, to respond to issues as if they were wholly or predominantly unrelated and to alter their initial opinion in the face of persuasive communications. Evidence from two very different empirical methodologies showed that both individual and aggregate measures of opinion are significantly altered when people become better informed about the objects of their attitudes. Taken together, I have interpreted these findings as indicating that 'weaker', more descriptive theories of democracy and 'low information rationality' models of voting behaviour lack basic empirical justification.

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As a researcher whose primary training has been as a social psychologist, it is perhaps dangerous to afford oneself the luxury of venturing very far into neighbouring disciplines – particularly ones as theoretically and epistemologically complex as political theory and behaviour. However, if social-psychological theories of the attitude are to have any useful application outside the narrow confines of internal conceptual and methodological debates, such sorties on to ‘foreign soil’ will always be necessary. Thus, while I make no claims to having directly contributed to the development of theories of democracy in this thesis, I hope nonetheless to have provided some useful input to such debates by applying social psychological theories and methods in an assessment of questions which have, until recently, been empirically under-researched (Althaus 1998, Bartels 1996, Delli Carpini and Keeter 1996).

9.1 Caveats and Limitations

The questions and issues which I have addressed here are both complex and far reaching in their implications and it has not been possible, within the scope of this project, to directly evaluate all the various strands of the argument that uneven distribution of political knowledge and engagement within the general public leads to a ‘stratified democracy’ in which some individuals are endowed with greater political efficacy than others. To do so comprehensively would require significantly greater time and resources than were actually available to me. In none of the analyses, for example, have I looked directly at the thorny subject of objectively defining self-interest, nor as a consequence, have I been able to explicitly demonstrate that when attitudes do change as a result of increases in information, they become more aligned with the interests of those who hold them. Nonetheless, it is hoped that by drawing on the theoretical and empirical literature from a number of different research traditions and combining this with a series of original analyses on high quality, representative data sources, it has been possible to construct a coherent and convincing empirical account to underpin the central line of

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argument developed in the early chapters of the thesis. In addition to the theoretical and normative implications of the analyses, it is hoped that some methodological contributions might also be made to the various fields to which they pertain.

For the empirical analysis I have relied entirely on 'secondary' sources of data. While there are clearly a number of disadvantages to such an approach, I believe that they are outweighed by the benefits of basing one's conclusions on professionally collected, representative samples. The secondary analyst is at the mercy of those who originally designed the studies on which analyses are based, often people with completely different agendas and from other research paradigms and traditions. There is, for example, the constant frustration of finding a broken time series or the omission of a seemingly fundamental question to deal with. This, in addition to essentially having to adopt the methodological and theoretical formalisations of the research groups responsible for study designs places a number limitations on those who adopt this strategy of research (Scarbrough 2000).

Such limitations, however, are not really so problematic as might initially be assumed. For the divergence in theoretical and methodological approaches will depend on the perspective the secondary analyst him or herself brings to each specific data source, with different studies offering different theoretical and conceptual outlooks. Therefore, the questions one might wish to address may very often be adequately tackled via a search through the many publicly accessible archives, without the need for the collection of new data. This is the reason that the design and analysis of major, publicly funded studies does not begin and end with the ambitions of those responsible for designing them and underlies the many recent initiatives to formally document and archive all publicly funded empirical data. I have no idea, for instance, of the exact rationale for including the 'left-right' scale on the BHPS, although I doubt whether this explicitly included all of the uses to which I have put it in this

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thesis. Thus, while ideally a study of this kind would have drawn on primary survey and experimental data, I believe that it is ultimately more valid and reliable to be basing my conclusions on election study data than on a small and unrepresentative convenience sample of students.

There are, of course, other methodological avenues open to the researcher who wishes to investigate the issues I have sought to address in this thesis that do not rely on representative sample surveys. However, most of the theoretical problems I deal with in the thesis are inextricably linked with the methodologies upon which they are based. The debate over the longitudinal stability of attitudes addressed in chapters five and six, for example, is as much a question of methodology as it is a conceptual and theoretical issue. This is not to imply that other, non-quantitative techniques have no role to play in addressing the central questions of this thesis, but merely to state that my focus here is both theoretical *and* methodological and the methodology of the research tradition to which this thesis speaks has been almost entirely based on the quantitative analysis of survey data.

9.2 Overview of Main Findings

The thesis began with the proposition that perspectives which seek to downplay the importance of an equitably well-informed public are both theoretically unsound and empirically unsubstantiated. These approaches, reviewed in chapters one and two, have variously argued that democracy does not require an informed citizenry but can get by through a plurality of specialist interest groups (Dahl 1961, Dahl 1989) or through the mere provision of a public mandate to an elite executive (Schattschneider 1960, Schumpeter 1943). More social-psychologically oriented perspectives have proposed that individuals can act *as if* they were well informed about politics through recourse to, *inter alia*, cognitive heuristics, opinion leadership and on-line information processing strategies (Dimcock and Popkin 1995, Ferejohn and

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Kuklinski 1990, Lupia 1994, Page and Shapiro 1992 Lupia *et al* 2000). Such approaches, to varying degrees, rest on two key linked assumptions – that all individuals hold stable, meaningful attitudes toward matters of political import and that the aggregate distribution of opinion on these issues would be unaltered were the public to become better informed. The first three empirical chapters address the former and the last three chapters the latter of these assumptions. The final empirical chapter, while shedding further light on the relation between political awareness and the distribution of public opinion, also pays particular attention to evaluating some of the methodologies employed in the earlier analyses.

9.2.1 Belief System Structure and the Heterogeneity of ‘the Public’

One of the main findings to emerge from all of the various analyses across chapters was the importance of recognising the true heterogeneity of belief system structure in the general public. In many ways, in fact, the notion of ‘the public’ when discussing not *what* but *how* people think about politics is likely to increase confusion rather than clarity. The analytic strategy in chapters three to six proceeded from fitting models to the whole population sample to re-estimating the model on sub-samples of both highly informed and uninformed sub-samples. This approach revealed that basing conclusions about the belief systems of ‘the public’ on models fitted only to the whole sample would lead to unwarranted over-generalisation. In all these analyses, models which fitted the whole sample rather well, both in terms of overall model fit and the significance and effect size of individual parameters, more often than not, did not hold when applied to sub-groups with little interest in or knowledge about politics. The fact that models fitted to sub-groups with the highest levels of political awareness exhibited substantially *better* overall fit and larger effect sizes than those fitted to the whole sample further illustrated the problems inherent in adopting an homogenous view of the political sophistication of the public.

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Converse and others pointed out this heterogeneity many years ago, arguing that different issues attract different 'attentive publics' constituting those individuals who are particularly interested and engaged in the specific issue. Thus, the argument goes, nonattitudes do not always reside within the same exact sub-group but are distributed across different individuals depending on the particular issue at hand. What the analyses in this thesis suggest, however, is that, while this may be correct in the sense that most people will have attitudes in some areas but not in others, the same individuals do *tend* to be the nonattitude holders across a broad range of political issues and what links them is their lack of knowledge about and engagement in politics. In chapter three, for instance, sub-groups from both the BHPS and the BGES with low levels of political interest, engagement, educational qualifications and political knowledge, were shown to have substantially lower correlations between items tapping attitudes toward a range of issues related to 'left-right' political discourse.

Confirmatory factor analysis also showed that, for these same items, a one factor model could not be said to fit the observed data for this group of respondents. Not only was the overall fit of the one factor model worse for this group but the factor loadings were also substantially weaker and less reliable. As these items were specifically designed to form a scale to measure the 'left-right' core value, this finding calls into question the argument that all and not just some sub-group of the British public think about politics in these 'ideological' terms. And, while this latent construct could be said to act as a powerful and central organising principle in the belief systems of the politically aware, the analyses presented in chapter four suggest that, for the less politically aware, if such a construct can be said to exist at all, it exerts very little cohering influence on attitudes toward central issues of 'left-right' debate. Fitting regression paths from the left-right latent factor to single item policy attitude variables revealed strong and reliable relationships for the politically

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aware but weak and non-significant paths for the unaware group of respondents.

The same heterogeneity in belief system structure across levels of political awareness was also observed with respect to the temporal stability of political attitudes. In chapter five a longitudinal structural equation model showed that, even after correcting for measurement error in the six indicators, the stability of the left-right value dimension was nearly perfect over a two year period amongst the most politically aware but substantially lower amongst less politically engaged members of the public. This was even the case when weaker criteria were adopted for forming the political awareness groups, due to the poor fit of the common factor model to the groups used in chapters three and four. The longitudinal dimension of the data in the chapter five analysis allowed the inclusion of both common and unique factors as explanatory variables for each of the six items in the structural model. The common factor, representing the explanatory contribution made by the 'left-right' value dimension to the variance of each item and the unique factor, representing the contribution made by a range of idiosyncratic characteristics of the item such as wording and format. Decomposing the standardised item variance into that which is explained by each factor showed that the explanatory power of the 'left-right' value dimension was three to four times greater in the politically aware group of respondents. This indicates that, what reliable variance there is in these items amongst the less politically aware, relates predominantly to unique and idiosyncratic characteristics of the questions rather than that which is common to all of them. This reiterates the conclusion from chapters three and four that the extent to which people organise their belief systems in terms of abstract, higher order dimensions or categories is strongly related to their level of awareness and engagement in politics. Examining the over-time correlations between the common factor revealed that the positions people held on this core belief were significantly more stable amongst the better

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informed members of the sample – even after correcting for measurement error.

So the belief systems of the general public differ in a number of important ways across levels of political awareness. Most prominently, the less aware an individual is, the less their attitudes are inter-related, the less they are likely to make use of higher order values and beliefs and the less stable are their attitudes over time. These differences remain even when we have controlled for measurement error and seem to be quite historically persistent too. But what exactly underlies these differences? The answer Converse provided to this question when he observed the same basic phenomena some forty years ago was twofold. Many of the less politically aware do not even hold what any standard definition would constitute as an ‘attitude’ toward specific areas of government policy, nor do they think about politics in an ‘ideological’ manner. People provide essentially random (in the statistical sense), ‘top of the head’ responses merely in order to conform to the behavioural protocol of the survey interview and so as not to appear ignorant or stupid in front of the interviewer.

This explanation, however, while implicitly according an important role to knowledge or information, fails to explicitly articulate the exact causal mechanisms which lead to nonattitudes and is rather clumsy in employing a central construct (nonattitudes) which defines itself in terms of absence. So, having devoted the first three empirical chapters to demonstrating the nature and extent of differences in the political attitude systems of the general public, the later chapters of the thesis moved on to a more explicit evaluation of the hypothesis that it is knowledge or information about politics which is the fundamental factor underlying the observed differences in belief system structure.

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9.2.2 Information as a Determinant of Belief System Structure

A recent theoretical development which explicitly links the nonattitude perspective with models of survey response behaviour via level of knowledge or information was used as the underpinning rationale for the analyses presented in chapters six to eight. Zaller and Feldman's 'simple theory of the survey response' specifies four axioms of attitude construction and survey response which allow specific deductions about the response characteristics of groups differing in political awareness to be made. The theory rejects the notion of attitudes as pre-formed, crystallised entities waiting to be faithfully reported to interviewers. Instead it sees attitude responses as time and context dependent constructions derived by 'averaging' over the range of relevant considerations available to the respondent at the time of asking. Availability, in turn, depends on the extent to which contextual factors invoke considerations in conscious memory and the recency with which they were last brought to mind. A fourth axiom, resistance, states that the more informed an individual is, the less likely their attitudes are to be influenced by new information. This is because they are better able to recognise sources of information which conflict with the general complexion of their current beliefs on a particular issue and to resist incorporating this contradictory information within their existing belief systems.

Because the more politically involved have more relevant considerations from which to derive a response, the averaging axiom - in conjunction with central limit theorem - specifies that each response amongst this group will be closer to the 'true average' of the individual's range of considerations than for less politically involved individuals. This, in turn, implies that the attitudinal responses of the less politically involved and aware should be less stable over time and have less strong associations with responses to other attitude items. Which is, of course, a very accurate description of the observed response characteristics of this group. The Zaller and Feldman model, then, provides an

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explicit mechanism through which it is possible to explain the findings of the first three empirical chapters.

However, given the 'static' nature of these analyses, which rely on pre-existing or self-reported levels of awareness, we cannot be entirely confident that our theoretical model provides a valid and complete account of the observed data. For this reason, the second section of empirical analysis attempted to look more causally at the impact of increases in information on characteristics of survey responses to attitude items. Tentative and indirect evidence for an 'information effect' had already been provided in chapter five, where it was shown that the amount of reliable variance in the indicator items in the longitudinal factor model significantly increased between waves one and two of the BHPS but not between later waves. Similar findings have been reported elsewhere over much shorter time periods and are argued to be the result of the initial presentation of questions stimulating respondents to think about the issues more carefully and to become familiarised with both the subject matter of the questionnaire and the survey procedures. This interpretation was supported by the fact that the increase in item reliabilities on the BHPS was much greater amongst the least well informed respondents, who presumably had more to gain from the small stimulus to think about the issues more closely.

In order to evaluate the ability of the Zaller and Feldman model to predict the effects of increases in information on attitude response characteristics, data from a deliberative poll was analysed using essentially the same factor model as had shown an increase in item reliabilities between the first two waves in chapter five. The logic here was that, if such an effect could be achieved by merely asking questions related to left-right political discourse, then the effect of an 'information intervention' as strong as that provided by a deliberative poll should be of considerably greater magnitude. The results of the analyses in chapter six, however, failed to bear out this expectation. There was a slight

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increase in the average item reliability after the deliberative poll weekend but this masked a good deal of variation across items, some of which even showed a reduction rather than growth in reliability.

Unlike the results reported in chapter five, there was no evidence to suggest that any apparent increase in reliability was concentrated predominantly amongst the least politically informed - the effect was negligible whatever one's pre-existing level of political awareness. So, there had been attitude change over the course of the deliberative weekend but this had not served to increase the internal consistency of the respondents' belief systems as a whole. This somewhat surprising result (given the theoretical rationale and the results of previous analyses) was ascribed to at least two different but not mutually exclusive factors. First, the factor loadings between the items and the 'left-right' factor were not invariant across waves. As was discussed in section 6.5.1, this variance in the factorial structure of an attitude is uncommon, even over much longer time periods and indicates that there has been some fundamental shift in the meaning of the latent construct.

Thus, it might have been the case that the time period under consideration was simply too short and that additional waves of data, after the initial 'shock' of the information intervention had sunk in, might have revealed response characteristics more in line with the working hypothesis. This line of reasoning was supported by the fact that, amongst the less politically aware respondents, one of the factor loadings of the latent attitude became non-significant after deliberation. This was the loading for the item which related to the balance between tax and spending, while the loadings of the other three items - which related primarily to equalising incomes - remained significant. This suggested that the increase in information caused the less politically aware respondents to fundamentally re-evaluate their conception of how the items related to one another, compartmentalising them into more tightly defined units.

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Second, there was strong evidence to suggest that the composition of the deliberative poll sample was biased in the direction of greater political awareness and involvement – those attending the deliberative weekend being considerably more interested in and knowledgeable about politics than the general population. Therefore, it may well have been the case that there was some kind of ‘ceiling’ effect operating in terms of the reliabilities of the items used to measure the latent construct, due to the already high degree of political awareness and attitude constraint amongst those participating in the deliberative poll.

While the focus of chapter six had been on the direct effect of information on the inter-relatedness or constraint of attitude systems, chapter seven took a step back in the causal chain to look at how increases in information affected positions taken on individual attitude items and then, how such changes impacted on statistical measures of attitude constraint. The method adopted for this was the regression based ‘simulation’ modeling developed by Delli-Carpini and Keeter (1996) and Bartels (1996). This involves regressing a dichotomised attitude variable on to a range of theoretically related respondent characteristics and the interaction of these characteristics with a measure of the respondent’s knowledge of politics. The mean of the predicted probability of agreeing or disagreeing with a particular policy proposition for a model in which ‘full knowledge’ is imputed to all sample members can then be compared with the proportion of people actually agreeing or disagreeing with the proposition, given current knowledge levels. Comparing the two estimates provides a picture of how aggregate public opinion might change if everyone were as well informed as the currently best informed members of the public .

Models were fitted to a range of attitude items on both the 1992 and 1997 British Election Studies. Results supported the findings of previous research into information effects using both simulation modeling and deliberative

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polling – despite a great deal of self-cancelling at the individual level, there were consistent and often substantial shifts in aggregate public opinion with a better informed public. These findings add to a growing body of empirical research which calls into question the adequacy of theories of political behaviour which argue that uninformed individuals are able to derive opinions and voting intentions no different than they would if they were better informed. While strategies of ‘low-information’ rationality may indeed be surprisingly effective in many situations and no doubt nearly always ‘better than nothing’, they would still seem to fall some way short of what is achieved through rational and critical appraisal of the relevant facts. This idea is lent further support by research which shows that the more knowledgeable people are, the less likely they are to use such strategies and, to a much greater extent, base their voting intentions on an appraisal of party positions and how these match up with their own stands on these issues (Delli Carpini and Keeter 1996, Heath and McDonald 1988). Indeed, given the fact that the best informed members of society could also be argued to be those most likely to behave ‘rationally’ in classical economic terms, such evidence also questions whether political ignorance is really so rational after all.

It is also important to note, as was mentioned above, that the absolute amount of opinion change at the individual level in these analyses was diminished somewhat in the aggregate by attitude change moving in opposite directions. What this shows, in addition to the fact that just looking at macro-level change can underestimate the true extent of micro-level processes, is that the effect of increasing knowledge on opinion is not the same for all individuals but varies depending on the person’s initial position on the issue and their reason for holding it. This supports the idea of ‘enlightened preferences’ as a working definition for defining objective self-interest and strongly links the notion of political knowledge and political empowerment within a democratic system. The effect of greater knowledge, from such a perspective, is not necessarily to increase consensus or to act as an homogenising or proscriptive force on public

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opinion – although on some issues this may indeed be the actual result – because the way that one evaluates alternate courses of action and their likely outcomes (while facilitated with greater knowledge) will depend on the values and personal preferences that each individual brings to the evaluation of alternate outcomes.

From the final part of the analysis in chapter seven there was also tentative evidence that the effect of the changes in opinion at the individual level served to increase the internal consistency of attitude systems. On items which related to left wing or ‘laissez-faire’ approaches to economic policy, individuals with higher levels of knowledge more consistently adopted either a left or a right wing approach across different policy areas. This supports the idea that information or knowledge is an important factor in determining attitude constraint. In conjunction with the finding of a ‘Socratic’ effect on the BHPS in chapter five, this would suggest that the failure to detect a growth in the internal consistency and item reliability between waves of the deliberative poll should certainly not be taken as very conclusive. Further research on different deliberative polls and other study designs which involve an information intervention may prove more fruitful in elucidating the direct effect of political information on attitude constraint.

9.2.3 Evaluating the Normative Importance of Information Effects

In a political system which affords very little direct influence or participation for the citizenry beyond the periodic provision of an electoral mandate, might not these ‘information effects’ ultimately prove to be of rather trivial significance? After all, the general tenor of the findings from chapters six to eight was that information had a significant but *minor* impact on aggregate public opinion across a broad range of issues. However, while not wishing to overstate the case, I would argue that it would be complacent to dismiss these effects as being too weak to have any real impact on either the party of

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government or on the policy directions that the executive chooses to follow. The 2000 US Presidential election provides a telling reminder that something as trivial as the design of a ballot paper may ultimately prove decisive in an election in which over one hundred million votes were cast. Bartels' estimation that, in most years, Democrat candidates did around two percentage points better than they would have in a fully informed electorate shows that, depending on the tightness of the contest, a more knowledgeable public may well elect entirely different representatives.

Beyond the narrow confines of an election, modern publics can also exert an influence on the direction of government policy through the reporting of the results of opinion polls and other measures of 'the voice of the people' in the media. Governments may choose to pursue a particular policy or to delay or speed up the introduction of legislation on the basis of its impact in the polls. In Britain, for example, there has been a great deal of speculation since the Labour party came to power in 1997 over the likely timing of a referendum on joining the European single currency. Analysts have argued that the government's thinking on this issue is largely dictated by the 'flat lining' of public opinion against monetary integration throughout the years of its first term. A referendum would be delayed until at least the second term of office, if not indefinitely, because of the electoral significance of a defeat judged likely on the basis of the polls. In a deliberative poll conducted in Britain in 1995, however, Fishkin and his colleagues found that support for European integration and monetary union increased dramatically once the members of the sample had become better acquainted with the 'facts' and had time to more fully deliberate on the issues (Fishkin, 1997). Evidence from the simulation models and the deliberative poll in chapter eight also suggests that support for monetary union would be considerably stronger if the public were better informed about and engaged in the issues.

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It is, of course, impossible to demonstrate from this that the government would have altered its policy on the timing of a referendum had public opinion been consistently more favourable toward the idea, although this is the clear extrapolation from the majority of political and media analysis of the issue. Thus, while the effect of information on the complexion of government and the direction of policy may indeed be negligible in the vast majority of cases, there is sufficient evidence to suggest that when elections are tight or when the government's favoured policy conflicts with public opinion, the effect of public knowledge could easily prove decisive. As the least informed are also most likely to be the socially and economically marginalised sections of society, information gradients may, therefore, serve to compound and perpetuate social and economic inequalities through the greater voice open to those in positions of socio-economic advantage.

9.2.4 Methodological Considerations

The conclusions set out above concerning the distribution of political awareness, how this relates to the content and structure of belief systems and the way in which this, in turn, impacts on the political efficacy of different groups and individuals in society are based on what might be considered rather elaborate methodologies and statistical techniques. For this reason, a good deal of attention was paid throughout the thesis to the validity of these methods and the reliability of the estimates they produce. One thing that featured heavily in these discussions was the issue of measurement error in the analysis of attitudes. It has, indeed, been suggested that measurement error *per se* is the cause of the observed differences in the properties of the belief systems within the general public (Achen 1975, Erikson 1979, Pierce and Rose 1974).

The analyses presented here, however, suggest that while there is clearly a good deal of error in directly observed attitude indicators, differences across

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levels of political awareness and involvement persist even once measurement error has been partialled out. It is worth reiterating though, on the basis of the findings from this thesis, the importance of explicitly recognising and taking measures to mitigate against the effects of measurement error. These include the use of multiple indicators to measure directly unobservable social and psychological constructs and the use of statistical software that allows for the estimation of and correction for the error in each of the individual items. Such strategies serve both to provide better conceptual coverage and to protect against a systematic tendency to underestimate the strength of structural relationships. In the structural equation model presented in chapter five, for example, the longitudinal stability of the 'left-right' value dimension in the British public was found to be very high, with a Pearson correlation between the common factor at each time point of 0.9. If a single item were used to make this assessment, however, without any correction for measurement error, a completely different picture emerges - of massive 'churn' at the individual level. The over-time correlations between each of the items of the 'left-right' scale, for example, were only around 0.39.

A good deal of attention was also paid at various points to the validity and reliability of estimates of 'informed opinion' provided by the simulation models. Beyond general scepticism that such a feat is possible with multivariate statistics, this was important because, firstly the inclusion of so many interaction effects meant that, for each individual parameter, the standard tests of statistical significance were too conservative, leading to Type II errors. Furthermore, it was felt important to include all covariates in all the models for theoretical reasons rather than on the basis of the statistical significance of the parameter estimates. The robustness of the estimates was, therefore, assessed through two main strategies, the use of alternate measures of political knowledge in the same model and the replication of the same models on independent samples. Both strategies indicated that the estimates of attitude change were quite reliable - with very similar estimates obtained

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across samples and irrespective of whether a policy oriented or institutional/constitutionally focused measure of knowledge was used. This latter finding further suggests that, while different types of political knowledge may have different implications for the distribution of individual and public opinion, people nevertheless tend to be generalists when it comes to political knowledge. So, whichever type of knowledge measure we use, the estimates of opinion change we obtain are likely to be similar.

That the reliability of the estimates seems good says little about their validity which is much more difficult to ascertain, given the lack of any independent, objective standard. Therefore, a less direct strategy was adopted toward the assessment of the validity of these estimates. This involved comparing the estimates of opinion change across a number of items from the simulation models with those produced by the deliberative poll. The logic here is that two methods which purport to do the same thing – i.e. reveal the distribution of ‘informed public opinion’ – should produce the same or at least similar results. There are clearly problems with this form of construct or ‘concurrent’ validation: if only one of the methods produces valid estimates then the comparison will tell us nothing about which is the superior. It is also possible that both methods might be systematically biased but produce broadly similar results. In such a scenario, the similarity of the estimates might lead us to erroneously support the validity of both methods. Nonetheless, given the wide divergence of the two methods involved, a comparison of the estimates they produce should provide some limited insight into the validity of both.

The results of the comparison showed that the estimates of opinion change were either very similar or quite different, depending on the level of precision required. If precise estimates on specific, individual issues were needed, the estimates produced by the two methods would likely be quite divergent. If a broader and more general view of information effects across a range of issues were desired, however, both methods would tell us pretty much the same

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thing - that, in the aggregate, the effect of a better informed public on the distribution of opinion is quite minimal, although with a number of exceptions to this general rule. Several items in chapter eight, for instance, exhibited a substantial shift in preference with more information and on a number of items the closeness of the estimates of change across methods was striking. Both showed, for example, that support for the Liberal Democrats would increase by more than twenty five percent with a better informed public. So, while the estimates produced by the two different methods did not match up perfectly, they certainly agreed more closely than chance alone would predict. Given the random variation due to sampling in all of these estimates, the similarity of the results was argued, in chapter eight, to lend support to the validity and reliability of both methods.

9.3 Is Political Ignorance Inevitable or Irreversible?

The findings and the interpretations placed on them in this thesis raise the obvious question of what can be done to improve the current state of affairs. Is the uneven distribution of political awareness within the general public inevitable? And if it isn't, what can be done about it? In many respects these are questions which move beyond the scope of this thesis, although some of the analyses presented here do go some way toward addressing them, even if in only an indirect manner.

One of the main justifications for those who support the idea that democracy can function adequately without a well-informed public or who contend that citizens need not be very knowledgeable about politics to make instrumental decisions, seems to be the idea that civic disengagement and political ignorance is somehow inevitable. In evidence, they point to the distinct lack of improvement in the public's political knowledge and the general sophistication of political thinking since measurements first began, despite the fact that many more people stay on much longer in education and are often

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explicitly tutored in how to be 'a good citizen'. Perhaps, they argue, people's apparent active disinterest in politics means that there will always be a section of the electorate who remain almost totally ignorant of the structures, institutions and substance of politics, no matter what steps are taken by the polity to mitigate against this. Accepting the inevitability of political ignorance, they look for ways of salvaging democracy by weakening its meaning (Delli-Carpini and Keeter, 1996).

I would argue, however, that such perspectives take too one-sided a view of the empirical evidence and emerge with unduly pessimistic conclusions as a result. For example, the uneven distribution of political awareness and engagement within the general public can be argued to have potentially both pessimistic *and* optimistic implications for the future, depending on how the issue is framed. For the very fact that some sub-groups of the population are quite knowledgeable and sophisticated in the way they think about politics suggests optimism over whether the situation might be improved. The empirical evidence clearly demonstrates that political knowledge and engagement is strongly associated with other social and economic indicators and, to this extent, its uneven distribution is no more inevitable than poverty, discrimination, illiteracy or other social ills that most would agree should not only be reduced but eradicated - even if this might be considered a long-term and rather idealistic goal.

Indeed, the fact that political knowledge and engagement seems to be most densely concentrated amongst those groups with an existing monopoly on more traditional indicators of social and economic power suggests that the uneven distribution of political awareness is far from accidental but, rather, serves to bolster and maintain existing inequalities. The analysis of the deliberative poll in chapter eight showed that, even on what might be considered a rather weak indicator, this quite representative sample increased their level of knowledge over the course of the deliberative weekend and this

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increase in information affected some quite large shifts in individual and aggregate opinion. This demonstrates that people can become more interested in and knowledgeable about politics, even over a relatively short period of time and suggests that we should perhaps not be too quick to discount the ameliorative effects of general education on interest in and knowledge of politics in the wider public.

But what of the seeming intransigence of political ignorance in the face of an ever expanding educational environment? (Bennett 1988, Delli Carpini and Keeter 1996) Surely this suggests that a significant minority of the public seem determined to remain switched off and ignorant about politics, no matter how much they are encouraged otherwise through formal education? Such a perspective, however, isolates education as the sole factor affecting the political sophistication of the general public and ignores the fact that, while the general level of educational attainment has undoubtedly both broadened and deepened over the last fifty or so years, there have also been a great many other social and historical changes that are likely to have simultaneously depressed knowledge and engagement in politics. The breakdown in social and civic trust, the loosening of community and family ties, in conjunction with the often pernicious influence of the modern media on political discourse and debate are all factors which are likely to have played a major role in counter-acting any benign effect of education on the political involvement of the populace.

The widespread apathy and disengagement from politics that has emerged in conjunction with the social upheavals and the information and technological revolutions of the twentieth century is likely to have largely counteracted any positive influence that wider access to education might have brought. To be sure, knowledge of and engagement in politics are demonstrably different things but they are, nonetheless, intimately related. The more interested and engaged we are in politics, the more likely we are to seek out and retain

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political information (Zaller 1992). Thus, initiatives which serve to increase the extent to which the citizenry feel involved and interested in the political process are also likely to enhance the ability of the polity to exercise power in the public interest. What initiatives might serve such a function? Generally, we might expect that increasing the extent to which citizens feel a sense of efficacy in the decision-making process would serve to augment their interest in it. It has often been argued that the causes of political disengagement and apathy are to be found in the feelings of disempowerment and detachment from an increasingly complex and distant decision making apparatus amongst large sections of the public. What is the point of becoming engaged in a process over which one has no effective input or control?

By providing citizens with not just a sense of participation but an active role in the political process, we may serve to revitalise a sense of civic engagement which would feed through into a deeper and more equitably distributed awareness of politics. This will not be achieved through any simple formula or raft of government measures and a detailed consideration of the institutional, constitutional and social transformations that might ameliorate the current situation is beyond the scope of this thesis. Nonetheless, even without specifying the exact mechanisms through which a problem may be solved, demonstrating that the problem exists, showing that it is not inevitable and proposing the general means through which it might begin to be reversed are important steps in this direction.

9.4 Future directions of Research

The findings set out in the preceding chapters represent a starting point for many additional lines of enquiry which have emerged from attempts to address the questions with which the thesis began. In demonstrating, for instance, that a person's general knowledge of politics affects their political preferences, the issues of what we really mean by political knowledge and the

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exact nature of this construct's relationship with political preferences become more prominent. By concluding that in certain instances deliberative polls and simulation models come up with very similar estimates of opinion change, we beg the question of what factors cause estimates from the two methods to converge and which to diverge. In this final section, then, I look at some areas in which the empirical research presented in the earlier chapters might usefully be developed and extended.

In all of the empirical chapters of this thesis, a heavy emphasis was placed on establishing the robustness of any results obtained, mainly by replicating models on independent samples. While this strategy allows greater confidence to be placed in the empirical findings for any particular model, the emphasis on establishing the reliability of model parameters limits its use in developing theoretical explanations for variations and anomalies in the initial pattern of findings. It would be useful, therefore, to replicate the findings from the current analyses on further independent samples but with more of an emphasis on testing hypotheses concerning their initial variation. In this regard, it would be interesting to evaluate the hypothesis – advanced in chapter eight – that information effects are greatest on issues on which the public has very little knowledge and which are not particularly prominent in the media or elite political discourse. This makes a certain logical sense and could be tested empirically by specifying *a priori* the level of public 'controversy' and awareness across a range of issues and examining how this feeds through to the magnitude and direction of opinion change with both deliberative poll and simulation methods. Not only might this elucidate the processes underlying the relationship between knowledge and public opinion and why the two methods either converge or diverge across issues but it might also provide a useful diagnostic tool through which it might be possible to identify fruitful areas for further deliberative poll and simulation research.

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In chapter eight a number of problems with the political knowledge construct and how it is related to expressed preferences on political issues were discussed. These centred around the issues of what we mean by being 'fully' or 'well' informed about politics and the linearity or otherwise of the relationship between political awareness and political preferences. Both of these would currently appear to be under-researched areas and could be usefully addressed in future investigations. By using different measures of political knowledge which contain items with differing diagnostic sensitivities, it may be possible to get a more detailed picture of the amount of variation at the current 'ceiling' of existing measures. Seeing how any variation in knowledge within the group we would currently define as being 'fully informed' is itself related to political preferences, would provide an indication of the validity of our current conclusions about how knowledge is related to positions on particular issues. We may find, for example, that if those we currently define as being fully informed on our somewhat blunt measures of political knowledge were to become even better informed, their preferences would again shift on particular issues. This would be problematic for both the deliberative poll and simulation methods, as it would imply that knowledge is not related to political preference in any simple, linear manner and that neither the top of our knowledge scale nor one's state of mind at the end of a deliberative poll represent any sort of end-point in the domain of political knowledge. A related but more straightforward analysis might investigate the linearity or otherwise of the relationship between knowledge and preference direction within the confines of our existing knowledge scales.

The quasi-experimental and regression based analyses of chapters six through eight, which investigated the effect of information on the inter-relatedness of attitude systems provided somewhat inconclusive results. In chapters five and ~~eight~~^{seven}, there was some strong evidence to suggest that increasing an individual's level of knowledge about political issues augments the strength of statistical associations between relevant attitude items. In chapter six,

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however, which provided the most direct and explicit test of this hypothesis, no evidence was found in support. It would, therefore, be valuable to gather a more extensive array of attitude items across a range of deliberative polls (or other study designs which incorporate a specific 'information intervention') in order to evaluate the relationship between political knowledge and attitude constraint more thoroughly and conclusively. Ideally, this would include at least one deliberative poll which incorporates more than two waves of data collection in order to examine how response characteristics evolve after the initial shock of the information intervention has had time to sink in.

In a related vein, the processes hypothesised to underlie the 'Socratic effect' reported in chapter five (and previously by Jagodzinski et al (1987) and Batista-Fouget and Saris (1997)) could usefully be further delineated. It has been argued that the increase in attitude item reliabilities observed between the first two waves of panel studies is due to the increased familiarity with the issues and question format that the subject gains from mere exposure to the questions. From the perspective of this thesis, it would be interesting to decompose this effect into its component parts, in order to establish the exact roles played by the respondent thinking about the issues and that by increased familiarity with the survey procedures and question format *per se*. This could be achieved by comparing the magnitudes of effects across surveys which employ different modes for different respondents on different waves. If the effect resulted primarily from the familiarity with the survey procedures rather than through a deeper consideration of the substantive issues, we might expect to see a reduced effect in panels which used different modes of data collection across the first two waves of the panel. Further comparing effects across respondents who were interviewed in different modes within the same wave would provide further insight into the dynamics of this effect. Whether the change in response characteristics results from a mere familiarity with being measured or whether it is more a function of the extent to and manner in which the respondent thinks about the substantive issues, has important

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implications for our conclusions about the role of information in determining the content and structure of attitude systems.

Zaller and Feldman's 'simple theory of the survey response' and how this relates to response characteristics across levels of political awareness was used as the main theoretical framework for the final three empirical chapters. To a large extent, the hypotheses generated from the four central axioms of the model were supported by the results of the analyses. There were, however, several anomalies in relation to the empirical findings and there remain a number of ambiguities over the central constructs and processes of this theory which should be addressed by future research if the theory is to be of continued utility in explaining how what we know is related to what we think.

The notion of 'considerations', for instance, is problematic in the same way as any model which tries to specify some form of hierarchical or atomic structure to human cognitions. If I have a 'consideration' relevant to taxation levels which says 'government should let people decide how to spend their own money', how is this any different from having a negative attitude toward high taxes? It is important to more closely define what is meant by each of the constructs specified in their formulation and to show how such definitions may be justified both theoretically and empirically. Furthermore, the resistance axiom (which specifies that people resist integrating new information which conflicts with their current beliefs) and the averaging axiom (people's survey responses are mathematical averages of the considerations in conscious memory) would both appear to be theoretically and empirically underdeveloped. We are not really told *why* people resist conflicting information nor are we told why the weights applied to each consideration in the averaging process should be equal. Having said this, however, the theory is a potentially powerful and useful one in understanding and explaining the complexities of survey attitude data and certainly represents an advance in theorising the link between survey response characteristics and the properties of attitudes. Future

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research, both experimental and survey based, could usefully address some of the problematic areas of the theory outlined above.

Finally, I should note that this thesis has had considerably more to say about the impoverished state of the public's political knowledge and sophistication than it has about how this state of affairs might be ameliorated in the future. This is due primarily to the boundaries imposed by a limited time scale and resources but also reflects the predominantly social-psychological focus of the thesis. And although the normative implications of the empirical research have been discussed at some length, it would be desirable to further develop the empirical work in directions which might elucidate more explicitly the social and historical conditions which give rise to the uneven distribution of political knowledge and engagement in the mass public and suggest mechanisms through which it might be possible to intervene in order to reverse existing inequalities.

APPENDIX A

Item wordings for the 'placement score'.

Each item is repeated for each of the three main parties. For the knowledge measure, each item is scored one if respondent places the Conservative party to the right of the Labour party *and* the Liberal Democrats, zero otherwise.

Item 1

Some people feel that getting people back to work should be the government's top priority. These people would put themselves in Box A. Other people feel that keeping prices down should be the government's top priority. These people would put themselves in Box K. And other people have views somewhere in-between, along here (A-F) or along here (K-F). In the first row of boxes, please tick whichever box you think comes closest to the views of the Conservative Party.

Item 2

Some people feel that government should put up taxes a lot and spend much more on health and social services. These people would put themselves in Box A. Other people feel that government should cut taxes a lot and spend much less on health and social services. These people would put themselves in Box K. And other people have views somewhere in-between, along here (A-F) or along here (K-F). In the first row of boxes, please tick whichever box you think comes closest to the views of the Conservative Party.

Item 3

Some people feel that government should nationalise many more private companies. These people would put themselves in Box A. Other people feel that government should sell off many more nationalised industries. These people would put themselves in Box K. And other people have views

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somewhere in-between, along here (A-F) or along here (K-F). In the first row of boxes, please tick whichever box comes closest to whichever box you think comes closest to the views of the Conservative Party.

Item 4

Some people feel that government should make much greater efforts to make people's incomes more equal. These people would put themselves in Box A. Other people feel that government should be much less concerned about how equal people's incomes are. These people would put themselves in Box K. And other people have views somewhere in-between, along here (A-F) or along here (K-F). In the first row of boxes, please tick whichever box comes closest to whichever box you think comes closest to the views of the Conservative Party.

Item 5

Some people feel that Britain should do all it can to unite fully with the European Union. These people would put themselves in Box A. Other people feel that Britain should do all it can to protect its independence from the European Union. These people would put themselves in Box K. And other people have views somewhere in-between, along here (A-F) or along here (K-F). In the first row of boxes, please tick whichever box you think comes closest to the views of the Conservative Party.

Appendix A

Dependent	start L-R	end L-R	L-R diff.	df	p	Pseudo R ²
defence	2317	2289	28	9	.0009	.062
left wing	2170	2156	14	9	.1222	.094
authoritarian	1984	1957	27	9	.0013	.193
order	2168	2141	27	9	.0014	.066
schools comp.	1795	1778	17	9	.0517	.054
fair share	2158	2138	20	9	.0217	.078
one law for rich	2113	2100	13	9	.1620	.079
trade unions	2161	2144	17	9	.0499	.095
private ent.	1916	1901	14	9	.1180	.099
public services	2161	2131	31	9	.0004	.044
gov. resp.	2126	2057	69	9	.0000	.148
young people	1456	1442	15	9	.0938	.088
censorship	1329	1298	30	9	.0004	.171
public meetings	2095	2049	45	9	.0000	.087
homosexuals	1989	1935	53	9	.0000	.148
totalitarian	2232	2210	22	9	.0082	.035
democracy	1570	1550	19	9	.0215	.044

Table A.1 Significance of Information Effects, Quiz score 1992

Dependent	start L-R	end L-R	L-R diff.	df	p	Pseudo R ²
defence	4720	4679	40	9	.0000	.036
left wing	3835	3788	47	9	.0000	.119
authoritarian	3632	3581	51	9	.0000	.183
order	3971	3948	23	9	.0056	.073
schools	3537	3521	16	9	.0718	.046
compete						
fair share	3903	3848	55	9	.0000	.063
one law for rich	3406	3393	12	9	.1977	.057
trade unions	3977	3931	46	9	.0000	.087
private ent.	3661	3629	32	9	.0002	.065
public services	4000	3932	69	9	.0000	.059
gov. resp.	3899	3878	21	9	.0136	.072
young people	1778	1752	26	9	.0022	.054
censorship	2358	2300	59	9	.0000	.185
public meetings	3693	3625	67	9	.0000	.061
homosexuals	3689	3633	56	9	.0000	.159
totalitarian	4073	4009	64	9	.0000	.059
democracy	2858	2806	20	9	.0199	.032

Table A.2 Significance of Information Effects, Placement score 1997

Appendix A

Dependent	start L-R	end L-R	L-R diff.	df	p	Pseudo R ²
defence	4720	4700	20	9	.0000	.028
left wing	3835	3818	17	9	.0000	.107
authoritarian	3632	3594	38	9	.0000	.178
order	3971	3935	36	9	.0056	.078
schools comp.	3537	3509	28	9	.0718	.051
fair share	3903	3875	28	9	.0008	.052
one law for rich	3406	3394	12	9	.2366	.057
trade unions	3977	3948	29	9	.0007	.080
private	3661	3619	42	9	.0000	.070
enterprise						
public services	4000	3959	42	9	.0000	.048
gov.	3899	3857	42	9	.0000	.081
responsibility						
young people	1778	1768	10	9	.3465	.043
censorship	2358	2312	46	9	.0000	.179
public meetings	3693	3592	101	9	.0000	.076
homosexuals	3689	3636	53	9	.0000	.158
totalitarian	4073	4009	64	9	.0000	.059
democracy	2858	2792	33	9	.0001	.039

Table A.3 Significance of Information Effects, Quiz score 1997

Question wordings for dependent variables in simulation model analysis

1. Ordinary people get their fair share of the nation's wealth.
2. There is one law for the rich and one for the poor.
3. Private enterprise is the best way to solve Britain's economic problems.
4. Major public services and industries ought to be in state ownership.
5. It is government's responsibility to provide a job for everyone who wants one.
6. There is no need for strong trade unions to protect employee's working conditions and wages.
7. People should be allowed to organise public meetings to protest against the government
8. Homosexual relations are always wrong.
9. People should be more tolerant of those who lead unconventional lives.

Appendix A

10. Political parties which wish to overthrow democracy should be allowed to stand in general elections.
11. Censorship of films and magazines is necessary to uphold moral standards.
12. Young people today don't have enough respect for traditional values.
13. It is a good thing for schools to be made to compete against each other for pupils.
14. Do you think the government should or should not spend less on defence?
15. If you had to choose among the items on the list below, which are the two that seem most desirable to you? (Maintaining order in the nation)

variable name	meaning
Defence	spend more on defence
left wing	left of centre on left-right summed scale
authoritarian	authoritarian side of lib-auth scale
order	selected order in nation as most desirable goal
schools compete	schools should compete for pupils
fair share	takes left wing position code 1 or 2
one law for rich	takes left wing position code 1 or 2
trade unions	takes left wing position code 1 or 2
priv ent	takes left wing position code 1 or 2
public services	takes left wing position code 1 or 2
gov. resp.	takes left wing position code 1 or 2
young people	takes liberal position code 1 or 2
censorship	takes liberal position code 1 or 2
public meetings	takes liberal position code 1 or 2
homosexuals	takes liberal position code 1 or 2
tolerant lifestyle	takes liberal position code 1 or 2
democracy	takes liberal position code 1 or 2

Table A.4 Coding of Dependent Variables

Appendix A

1992			
info level	all	no quals	quals
actual	0.43	0.31	0.39
none	0.29	0.25	0.26
full	0.42	0.38	0.38

Table A.5 Mean correlation of lib-auth items by info group 1992

1992			
info level	all	no quals	quals
actual	0.58	0.65	0.63
none	0.54	0.56	0.56
full	0.74	0.81	0.83

Table A.6 Mean correlation of left-right items by info group 1992

APPENDIX B

Question Wordings for Placement Score

All questions are answered on a 7 point scale and each item is repeated for each of the three main parties. For the knowledge measure, each item is scored one if respondent places the Conservative party to the right of the Labour party *and* the Liberal Democrats, zero otherwise.

1. Where do the Conservative party stand on making people's incomes more equal? Are they in the top box agreeing completely with the statement below? Or in the bottom box disagreeing completely with the statement? Or one of the boxes somewhere in between?

Government should try much harder to
make incomes in Britain more equal.

2. Where do the Conservative party stand on taxes and spending? Are they in the top box agreeing completely with the statement below? Or in the bottom box disagreeing completely with the statement? Or one of the boxes somewhere in between?

Government should spend a lot more on
services like education and health, even if it
means putting up taxes a lot.

Appendix B

3. Where do the Conservative party stand on the minimum wage? Are they in the top box agreeing completely with the statement below? Or in the bottom box disagreeing completely with the statement? Or one of the boxes somewhere in between?

Government should definitely introduce a minimum wage so that no employer can pay their workers too little.

4. Where do the Conservative party stand on the European Union? Are they in the top box agreeing completely with the statement below? Or in the bottom box disagreeing completely with the statement? Or one of the boxes somewhere in between?

Government should do much more to unite fully with Europe.

Appendix B

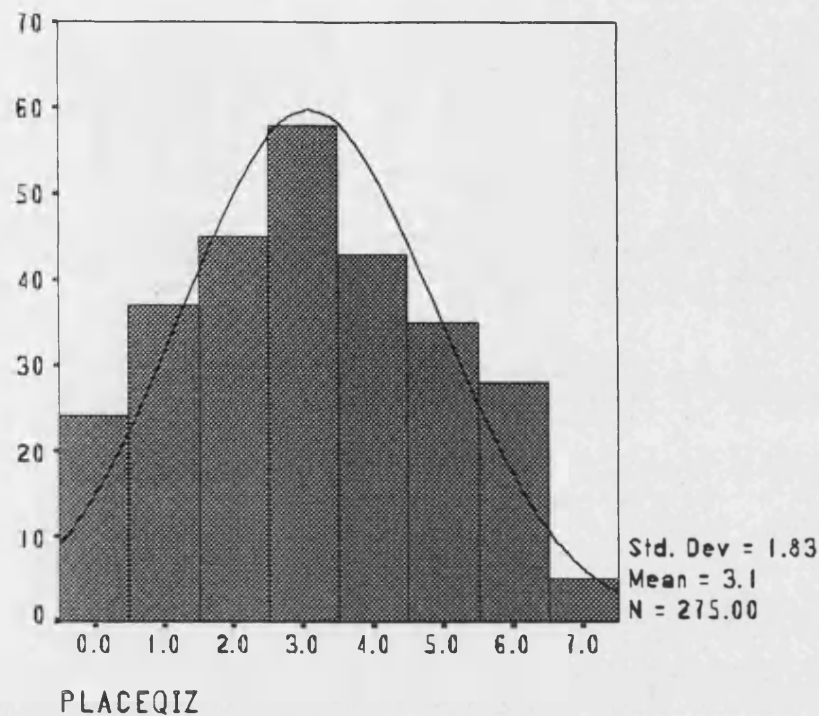


Figure B.1 Histogram for Deliberative Poll Knowledge Scale

Question Wordings for Dependent Variables in Simulation Models

1. Please tick a box to show how you feel about each of the parties below.
 - a) The Conservative Party
 - b) The Labour Party
 - c) The Liberal Democrats

Response scale = 5 point Likert, strongly agree to strongly disagree.

2. Thinking back to the last general election in 1992. Generally speaking, what do you think has happened to the economy since then. Has it...

...got a lot stronger,
got a little stronger,
stayed about the same,

Appendix B

got a little weaker,
or, got a lot weaker
Can't Choose.

3. Again thinking back to the last general election in 1992. Since then, do you think each of these things has gone up, gone down or stayed about the same?
- a) The rate of inflation
 - b) The level of unemployment
 - c) The overall level of taxes
 - d) The quality of the NHS
 - e) The standard of education

Response scale = 5 point Likert, gone up a lot to gone down a lot.

4. Suppose the Conservative party were to win the general election later this year. Generally speaking, what do you think would happen to the British economy over the next five years. Would it...

...get a lot stronger,
get a little stronger,
stay about the same,
get a little weaker,
or, get a lot weaker
Can't Choose.

5. And what if the Labour party were to win the general election later this year. Generally speaking, what do you think would happen to the British economy over the next five years. Would it...

...get a lot stronger,
get a little stronger,
stay about the same,

Appendix B

get a little weaker,
or, get a lot weaker
Can't Choose.

6. Suppose the Conservative party were to win the general election later this year. Over the next five years do you think each of these things would go up, go down or stay about the same?
- f) The rate of inflation
 - g) The level of unemployment
 - h) The overall level of taxes
 - i) The quality of the NHS
 - j) The standard of education

Response scale = 5 point Likert, gone up a lot to gone down a lot.

7. What if the Labour party were to win the general election later this year. Over the next five years do you think each of these things would go up, go down or stay about the same?
- k) The rate of inflation
 - l) The level of unemployment
 - m) The overall level of taxes
 - n) The quality of the NHS
 - o) The standard of education

Response scale = 5 point Likert, gone up a lot to gone down a lot.

8. Under which government do you think you personally would be better-off over the next five years?

much better off under a Conservative government than under a Labour one,
a little better off under a Conservative government than under a Labour one,

Appendix B

about the same under either government,
a little better off under a Labour government than under a Conservative one,
much better off under a Labour government than under a Conservative one,
Can't choose.

9. How fair would you say the British tax system is in the way it taxes the different income groups? On the whole, do you think it is...

...very fair,
quite fair,
not very fair,
or, not at all fair?
Can't choose

10. How much do you agree or disagree that people earning around £50 000 a year or more should pay higher income tax than now?

Agree strongly,
Agree
Neither agree nor disagree
Disagree
Disagree strongly
Can't choose

11. Where do you stand on making people's incomes more equal? Are you in the top box agreeing completely with the statement below? Or in the bottom box disagreeing completely with the statement? Or one of the boxes somewhere in between?

Government should try much harder to
make incomes in Britain more equal.

Appendix B

12. Where do you stand on taxes and spending? Are you in the top box agreeing completely with the statement below? Or in the bottom box disagreeing completely with the statement? Or one of the boxes somewhere in between?

Government should spend a lot more on services like education and health, even if it means putting up taxes a lot.

13. Where do you stand on the minimum wage? Are you in the top box agreeing completely with the statement below? Or in the bottom box disagreeing completely with the statement? Or one of the boxes somewhere in between?

Government should definitely introduce a minimum wage so that no employer can pay their workers too little.

14. Where do you stand on the European Union? Are you in the top box agreeing completely with the statement below? Or in the bottom box disagreeing completely with the statement? Or one of the boxes somewhere in between?

Government should do much more to unite fully with Europe.

15. Compared with other countries in the European Union, Britain is an overtaxed nation.

Agree strongly,

Agree

Neither agree nor disagree

Appendix B

Disagree
Disagree strongly
Can't choose

16. Compared with other countries in the European Union, the British Government spends too little on public services like health and education.

Agree strongly,
Agree
Neither agree nor disagree
Disagree
Disagree strongly
Can't choose

17. Unless Britain keeps its own currency, it will lose too much control over its own economic policy.

Agree strongly,
Agree
Neither agree nor disagree
Disagree
Disagree strongly
Can't choose

18. Suppose the Conservative party were to win the general election later this year. Do you think each of these groups would be better off or worse than now?

- a) People on high incomes
- b) People on low incomes
- c) People on benefits
- d) Pensioners

Appendix B

All the above answered on 5 point Likert scale, a lot better off to a lot worse off.

19. Suppose the Labour party were to win the general election later this year.

Do you think each of these groups would be better off or worse than now?

- e) People on high incomes
- f) People on low incomes
- g) People on benefits
- h) Pensioners

All the above answered on 5 point Likert scale, a lot better off to a lot worse off.

20. Please tick one box to show which party you would be most likely to vote for if the general election was tomorrow.

- a) The Conservative Party
- b) The Labour Party
- c) The Liberal Democrats
- d) The SNP
- e) Plaid Cymru
- f) Another
- g) I would not vote
- h) Can't choose

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